BHC: ON THE ROPES NOW, CAN IT RALLY?

# Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

February 29, 1960

OPD SPECIAL
'DEPTH' REPORT
PAGE FIVE

#10

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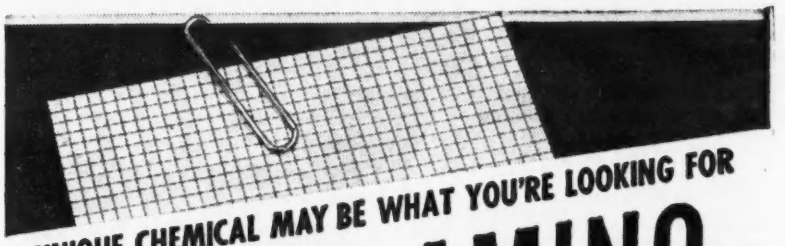

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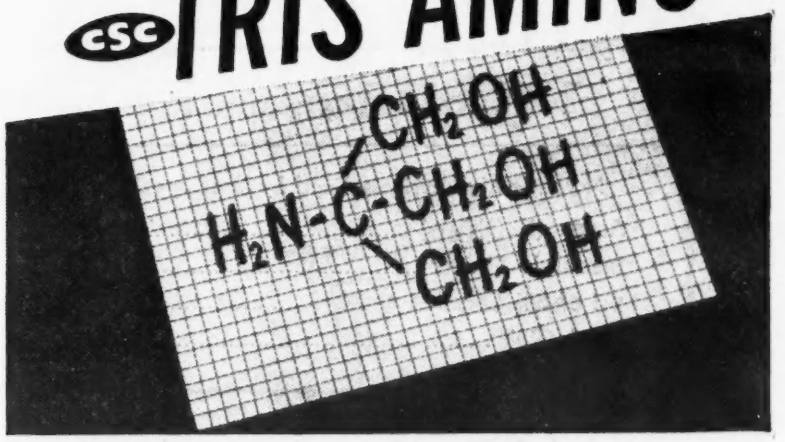


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| PROPERTIES | |
|---|---|
| Molecular Weight | 121.14 |
| Boiling Point, °C | 219 to 220 at 10mm |
| Melting Point, °C | 171 to 172 |
| pH of 0.1M Aqueous Solution at 20°C | 10.4 |
| Solubility in Water at 20°C, g/100 ml | 80 |

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|---|---|
| Assay $(Zn(NO_3)_2)$ | 70.0-75.0% |
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| pH of 5% Solution at 25°C. | 4.5-6.0 % |
| Lead (Pb) | 0.010 % |

**A SELECTED LIST OF J. T. BAKER ZINC, MERCURY AND LEAD SALTS**

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**Zinc Nitrate, Technical & Reagent**
Zinc Chloride, N.F., Technical & Reagent
Zinc Oxide, Reagent & U.S.P.
Zinc Sulfate, Purified, Reagent & U.S.P.

**MERCURY SALTS**

**Mercuric Nitrate, Purified & Reagent**
**Mercuric Oxide, Red, Purified & Reagent**
**Mercuric Sulfate, Reagent**
Mercuric Acetate, Reagent
Mercuric Chloride, U.S.P. & Reagent
Mercuric Oxide, Yellow, N.F. & Reagent

**LEAD SALTS**

**Lead Acetate, Technical, N.F. & Reagent**
**Lead Nitrate, Technical & Reagent**
**Lead Subacetate, Reagent**
Lead Borate, Reagent
Lead Chloride, Technical & Reagent
Lead Dioxide, Technical & Reagent
Lead Oxide, Red, Purified & Reagent
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Oil, Paint and Drug Reporter

Vol. 177 No. 10 30 Church St., New York 7, N. Y. February 29, 1960

Dr. Austin Smith

## US Chemical Savvy Will Go to Soviet Bloc

It appears that the Soviet bloc is going to get chemical plants from the United States, after all. The word is now out from Secretary of Commerce Frederick H. Mueller that the government has okayed applications from American companies calling for a variety of chemical projects in the Communist countries.

Among those receiving Commerce sanction are facilities for plastics, pulp and paper, manufactured gas, reclaiming rubber, phosphoric acid, feed and seed processing, fertilizer, textiles and silicon carbide varistors.

According to the Commerce Secretary, permission has been granted for the exporting of plant designs, engineering and construction services, materials and equipment. The US firms will also be allowed to provide the Reds with training and operating instructions.

Mr. Mueller makes it clear in his quarterly report on export controls that all that now stands in the way of this transfer of American technical data to the Communists is the successful negotiation of contracts by the US concerns.

In letting down the bars on American chemical technology, the government is apparently snubbing a long-standing policy position of the Manufacturing Chemists' Association.

MCA has vigorously stated on a number of occasions that under no circumstances

—*Continued on page* 49

## President Gets His Way On Water Pollution Bill

The President is going to have his way on water pollution control. The house last week failed by twenty-two to override Mr. Eisenhower's veto of a bill calling for a $900 million program. The vote was 249 to 157.

The measure provided for $90 million a year in federal funds to be made available to states and local communities over the next ten years for the building of sewage treatment plants and like facilities.

The present law, which runs to 1965, earmarks $50 million annually for the fight against stream pollution.

In turning thumbs down on the $90-million-a-year legislation earlier in the week, the Chief Executive surprised no one. He has made it quite clear for some time that he regards this as too much money.

His veto message stressed that such a stepped-up federal program would slow down, rather than speed up, control ac-

—*Continued on page* 41

# Drug Probers Now Discover They Have a New Tune to Play: Manufacturing Concentration

In what may be the first clue to a growing anxiety that their old, oft-repeated sour notes are falling on deaf public ears, the senate drug price investigators are now playing this new tune on an ancient theme: There's more concentration of production in the pharmaceutical industry than in any other manufacturing area. Said Sen. Estes Kefauver last week at the third—or general—round of hearings on the pricing of ethical drugs: "It's by far the highest I've seen in any industry."

Not so, said the lone industry witness of the week—Dr. Austin Smith, president of the Pharmaceutical Manufacturers Association—who presented voluminous, and what the normally hostile New York *Post* called "impressive," testimony to the contrary.

**Outgrowth of an Exhibit**

The Tennessee lawmaker's new-found charge grows out of an exhibit presented by Dr. John Blair, economist for the senate anti-monopoly subcommittee, at an unusual night session which dragged on into the early hours of the morning (see report at the right).

Dr. Blair reported that of fifty-one ethical pharamceuticals — hormones, diabetic drugs, tranquilizers, vitamins and antibiotics—twenty-seven are made by one company. These fifty-one products, he added, constitute about two-thirds of all the prescription drugs on the market.

Production of seven others, he went on, is confined to two drugs firms. Another nine pharmaceutical preparations are made by only three firms.

Pointing out that it is "natural for a firm to specialize," Dr. Smith contended that this "better serves the patient." What's more, he said, the patient has a choice of drugs.

The PMA president countered the subcommittee's monopoly allegations with the claim that the degree of competitiveness in ethical drugs "is approached by few other industries." In support, he called attention to this fact:

"More than 13,000 companies manufacture prescription drugs in this country, with no one company accounting for as much as 10 percent of total sales."

There was similar lack of agreement on drug industry research spending. Sen. Kefauver said his subcommittee has fig-

—*Continued on page* 31

### *Estes Keeps Drug Men Up Till the Wee Hours*

Sen Estes Kefauver, who is rumored to be keeping drug industry executives up till the wee hours these days, did that very thing two nights last week.

Sen. Everett McKinley Dirksen of Illinois, a vigorous critic of the Kefauver-conducted hearings on the pricing of ethical pharmaceuticals, objected to the anti-monopoly subcommittee sitting while the senate was in session. He pointed out that he couldn't be in two places at one time.

However, the Tennesseean was only momentarily balked by the Republican Minority Leader. Sen. Kefauver called the drug hearings to order at 10:30 p.m.—after the senate had adjourned—and kept the sessions going until nearly 2 a.m.

P. S. Sen. Dirksen didn't show up at either night's session.

## Ultra Chemical Is Building Its Second Detergent Plant

Ultra Chemical Works, Inc., a subsidiary of Witco Chemical Company, has begun construction of its second plant for production of detergents and detergent chemicals. Completion is scheduled for late 1960.

The installation, 40,000 square feet in area, will be located at Witco's site in the Clearing area of Chicago.

Plans call for a continuous sulfonation unit which, under normal operating conditions, is expected to produce 30 million pounds of dodecyl benzene sulfonate a year. Also planned are a 125-foot bi-directional spray-drying tower and high-speed automatic packaging equipment for both dry and liquid detergents.

## Phthalic Price Hikes Stir Up the Market

The phthalic anhydride market was set on its ear last week by two separate price advances which threaten to reverberate throughout a wide area of the coal chemicals industry.

Almost simultaneously, Monsanto Chemical Company and Reichhold Chemicals, Inc., posted higher spot and contract prices for phthalic. Monsanto boosted quotations to 18½ cents a pound, molten, in tankcars, f.o.b. works, freight equalized, and 19 cents a pound, drums, carlots, for flake.

Reichhold, which jacked up the price all by itself last summer from 17 cents a pound to 19 cents a pound for flake, and from 16½ cents to 18½ cents in tanks, kept ahead of the pack by scoring another 2-cent gain last week.

The White Plains, N.Y., firm will charge contract customers 20½ cents per pound,

—*Continued on page* 41

## Flemming Flatly Against Color Additive Tolerances

Secretary of Health, Education & Welfare Arthur S. Flemming is flatly against setting tolerances for color additives that are potential cancer-producers.

The HEW chief re-emphasized this stand at a press conference last week. Mr. Flemming said that his scientists tell him

—*Continued on page* 55

## Labeling Bill Up To Senate Now; FDA Is Snubbed

The hazardous substances labeling bill (S 1283) is now awaiting consideration by the senate, having cleared its commerce committee last week. In what must come as a rude shock to the Food & Drug Administration, the approved labeling measure failed to make any mention of food, drugs and cosmetics.

FDA had sought a separate title added to the bill which would have amended the food and drug act to give it the necessary labeling authority in these areas.

**'Very Acceptable': Flemming**

Nevertheless, Secretary of Health, Education & Welfare Arthur S. Flemming, told a press conference that the legislation is "very acceptable" to him in its present form.

However, he said that he will ask the house to insert what he feels is needed coverage for food, drug and cosmetic labels.

As matters now stand, FDA's labeling authority over drugs is limited to warnings against improper usage. It also oversees labels of foods that are sold in pressurized cans. But, says the agency, it has no jurisdiction at present over cosmetic labels.

S 1283 repeals the federal caustic poison act of 1927, which Secretary Flemming regards as outmoded.

"It is now applicable to many poisons and other hazardous substances and devices that are being used in homes today in ever-increasing numbers," he wrote the commerce committee.

Quite by coincidence, this letter urging prompt action on the labeling bill was written on the very day that the committee approved the bill.

FDA feels it needs broader authority over food, drug and cosmetic labeling. Prior to the senate committee action, it was generally believed that the separate title idea would be incorporated in S 1283.

The agency wants an additional warning written into the drug section of the food and drug law requiring warning labels for drug products that have a "reasonable risk of causing accidental injury."

What it has particularly in mind here are drugs packaged for first-aid treatment.

For cosmetics, it thinks that any toiletries of hazardous nature should carry the same cautionary labels that would be required under the labeling legislation.

In cases where there is some doubt whether a cosmetic should carry such a label, the HEW secretary would decide.

## USI Is Set to Become No. 2 in Polyethylene

With 300 million pounds of yearly capacity, U.S. Industrial Chemicals Company says it will become the world's second largest polyethylene producer this year. This entails a great big boost of 100 million pounds for the National Distillers & Chemicals Corporation division.

Most of the hike will come during the third quarter, when the company plans to start up new facilities now abuilding at Houston, Tex. The balance will consist of small increases at existing facilities located in Houston and Tuscola, Ill.

Who's going to buy the 100 million

—*Continued on page* 41

**ADVANCED: Raymond Devine, company controller, named vice-president of Pan American Sulphur Company, Houston, Tex.**

# Coaltar Color Delisting May Not Even Be Legal

The federal government, busy trying to delist a number of already certified coaltar colors, may not even have a legal right to do so.

At least, that is what Abbott Laboratories, North Chicago, Ill., thinks. The company is sure enough of its position to have just challenged the government in the United States Court of Appeals in Chicago.

Paul Gerden, general counsel for Abbott, asserts in a petition that such revocations would be "arbitrary, unreasonable, and contrary to law." He says there is no authority, "expressed or implied" for such action in the food, drug, and cosmetic act.

"There has been no showing of any conceivable hazard to the public health in the continued use of these colors," the petition reads.

Filed against Arthur Flemming, Secretary of Health, Education & Welfare, the petition states that "if on the basis of future evidence, any hazard were found to exist . . . respondent would have ample authority to prevent such use without ordering the decertification of existing certified lots."

The drug company's general counsel points out that Abbott has on hand at all times large inventories of pharmaceutical preparations containing batches of colors certified under the food, drug, and cosmetic act. He says that such colors are of "vital importance . . . to product identification and diversification . . . as an aid in dosage instructions and directions for use . . . and as an integral part of product and package design."

In the petition, Mr. Gerden states that Sec. Flemming and responsible officials of the Food & Drug Administration have indicated in public statements that most.

—*Continued on page* 31

V 177 10 FEB 60 XUM

# HEW Secretary Would Change Gov't Pollution Control Program

The Secretary of Health, Education & Welfare wants congress to make some major changes in the federal air pollution control program. Arthur S. Flemming let the house subcommittee on health and safety know exactly what he had in mind last week. In the first place, he believes that there should be no time limit set on the program and he feels that the $5 million ceiling on annual appropriations should be eliminated. Mr. Flemming further recommends that the Surgeon General be empowered to make investigations and hold public hearings on air pollution problems. Finally, he is seeking a technical amendment to the present law which would erase the requirement for allotment of funds appropriated for grants-in-aid and contracts.

Pointing out that there is "no question that air pollution is going to be a continuing problem," the HEW Secretary is of the opinion that the federal government should be authorized to carry on its work in this field "on a permanent basis."

**List of Proposed Changes**

He has a number of reasons for asking that the $5 million ceiling on appropriations be dropped:

- A great deal of the work in the federal program is of a long-term nature, for which appropriate planning is difficult under temporary authorizations.
- The present setup makes it difficult to exploit rapidly any important research findings which may call for a major expansion of investigative activities.

"Within the program currently," he says, "there are several developments which may, in the future years, necessitate larger appropriations for further exploitation."

- In general, it is not desirable to impose arbitrary budgetary ceilings on research and research programs, such as those unauthorized under the air pollution act.

Air pollution hearings by the Surgeon General, Mr. Flemming contends, will

—*Continued on page 26*

### *Polyethylene Scents Latest for Packaging*

If retailers want their goods to be smelled as well as seen through polyethylene packaging materials, Fragrance Process Company, has come up with an answer for them.

It is scented polyethylene, invented by the company's president, Alfred Neuwald. Sold in the form of a resin concentrate, the plastic is being manufactured from U.S. Industrial Chemicals Company's "Petrothene" film grade resin for extrusion.

The concentrate, trade-named "Poly-Scent," sells for $1.50 to $5 a pound, depending on the "flavor" desired.

Among the flavors now available: "clean linen," lavender, tweed, cedar, pine, spruce, chocolate, spearmint, orange, potato and, pending FDA approval, even onion.

## Monsanto Sees Afar, Cuts Styrene in '61

Latest gambit in the struggle for styrene preeminence appears in an announcement out of St. Louis, Mo.—Monsanto Chemical Company says it will reduce monomer prices eight-tenths of a cent a pound, effective July 1, 1961, or some sixteen months from now.

Making the price cut possible, according to Monsanto, will be production economies resulting from start-up of 200 million pounds of added capacity, slated for the first quarter of 1961 (OPD 2/8/'60).

In committing itself so far in advance, Monsanto is counting on steady-to-lower prices of benzene as well as swimming against the inflationary tide of the economy. Why?

For one thing, says trade sources, the move may be aimed at scaring away new-

—*Continued on page 55*

## Phenol Capacity Increasing

The plastics and coal chemicals division of Allied Chemical Corporation, New York, plans to expand phenol capacity at its Philadelphia facilities. With construction already underway by Catalytic Construction Company, the added capacity is expected to be on stream before year's end. Definite figures on volume have not been announced.

## Pennsalt Hikes Chlorine, Columbia-Southern Acts

Pennsalt Chemical Corporation has boosted bulk prices of liquid chlorine $4 per ton on spot, April 1 on contract. Late Friday (February 26) Columbia Southern Corporation announced a $2 boost. Three major firms are still to be heard from.

Columbia-Southern's move also included an advance of $2.50 a ton for soda ash, $2 a ton for high-test flake calcium chloride and $1 a ton for regular flake chloride.

The price increases were the first since 1956 on chlorine, and the first since 1957 on calcium chloride.

Whether Pennsalt will have to consider shaving $2 a ton off its intentions depends on what's forthcoming from Allied Chemical Corporation, Olin Mathieson Chemical Corporation and Hooker Chemical Corporation. The first two say they will probably move today.

The Pennsalt boost makes liquid chlorine $4.30 a hundred-weight in multi-unit tankcars for seventy-five tons or more a year; $4.50 for forty-five to seventy-four tons, $5.50 for less than forty-five tons.

## *The Week's Price Changes*

**Copal and Dammar Gums, Cottonseed Meal, Tallow Advanced. Copra, Lard, Linseed Meal, Lemon Bioflavonoid Reduced.**

**Prices Advanced**

Corn oil, crude, ¼c. per lb. (p. 56).
Refd., ¼c. per lb. (p. 56).
Cottonseed meal, $1 per ton (p. 56).
Greases, ⅛c. per lb. (p. 56).
Gums, Dammar, Congo copal, ¾c. to 1c. per lb. (p. 54).
Tallow, inedible, ⅛c. per lb. (p. 56).

**Prices Reduced**

Cocoa butter, 1c. per lb. (p. 56).
Coconut oil, Pac. coast, ¼c. per lb. (p. 56).
Copra, $5 per ton (p. 56).
Cottonseed oil, crude, ⅛c. per lb. (p. 56).
Refd., ⅛c. per lb. (p. 56).
Lard, cash, 1.5c. per lb. (p. 56).
Lemon bioflavonoid, $1.25 per lb. (p. 45).
Linseed meal, $3 per ton (p. 56).
Linseed oil, acid, ½c. per lb. (p. 56).
Linseed oil, ½c. per lb. (p. 56).
Oiticica oil, ½c. per lb. (p. 56).
Palm oil, 3 10c. per lb. (p. 56).
Soybean oil, crude, 1 10c. per lb. (p. 56).
Refd., 1 10c. per lb. (p. 56).
Tin, metal, 1c. per lb. (p. 32).
Salts, ½c.-3.5c. per lb. (p. 32).

**OPD Price Index**

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

| Feb. 26, 1960 | Feb. 19, 1960 | Feb. 27, 1959 |
|---|---|---|
| 111.12 | 111.21 | 114.72 |

## Chemical Forecast: Problems

Ten years and six problems. That is the way things in the chemical industry stack up in the eyes of Dr. R. L. Bateman, director of market development for Union Carbide Chemicals Company, New York, a division of Union Carbide Corporation. Dr. Bateman feels that the industry during the next decade must solve six major problems if it is to go along on an even keel. The Carbide executive expressed his opinions last week before the Delaware Valley Regional meeting of the American Chemical Society in Philadelphia.

Dr. Bateman cites the post-war emergence of synthetic organic chemicals as the "dynamic segment of the chemical industry" and points out that the industry's paramount challenge today is to maintain the growth rate established during the past fourteen years.

Attainment of this over-all goal can be achieved only if the industry successfully meets specific challenges in the six key areas, he says. Summarizing the areas in general, Dr. Bateman defines them as raw materials, research and development, capacity and demand, foreign competition, technical manpower requirements, and market development.

"Each of these areas presents a major challenge that must be solved satisfactorily if the synthetic organic industry is to

—*Continued on page 41*

**IN FOREIGN POSITION: William S. Nordburg, jr., named director of overseas projects for Amoco Chemicals Corporation, Chicago, a newly-created position.**

## Antifreeze Price Listings To Be Continued by Olin

Despite rising production costs, Olin Mathieson Chemical Corporation, Baltimore, Md., says there will be no change in its private label antifreeze prices for the coming season.

New contracts with marketers of private brand antifreeze will be issued effective April 1, but both ethylene glycol and methanol types of automotive antifreeze will be sold at present prices.

Private label antifreeze marketers, supplied by Olin Mathieson, are currently buying ethylene glycol (permanent type) antifreeze, at $1.365 per gallon, delivered in carload lots of one gallon cans. The comparable price for methanol type antifreeze is 61 cents per gallon.

## Canadian Mining To Have Local Source of Xanthates

Canadian Chemical Company plans to introduce a line of xanthates for Canada's mining industry. The metals are used in ore flotation processes. Production is expected to get under way at the company's Edmonton, Ont., plant early in the third quarter of this year.

The Montreal, Que., company says that part of the new output will be marketed abroad. Heretofore, Canada has had to import this line of chemicals.

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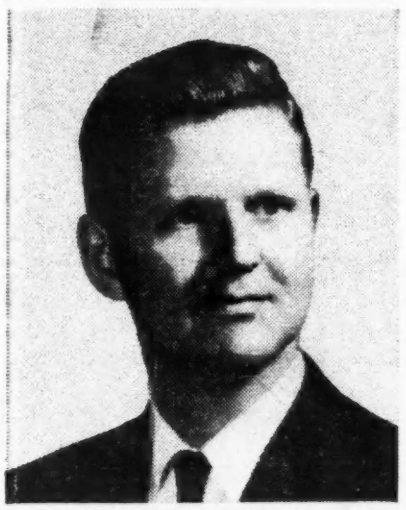
# BHC's DWINDLING OLD GUARD

## There Were Sixteen Makers in 1951

| Present Producer | Plant Location | Annual Capacity (Million Lbs. Gross) |
|---|---|---|
| Diamond Alkali | Greens Bayou, Tex. | 22 |
| Columbia-Southern | Natrium, W.Va. | 18 |
| Frontier | Wichita, Kans. | 15 |
| Hooker | Niagara Falls, N.Y. | 7 |
| Stauffer | Richmond, Calif. | 1 |
| Total | | 63 |

# Chemical Expenditures in 1960-61 Will Reach Whopping $1.657 Billion

The chemical industry will spend an estimated $1.657 billion for new US production and research facilities this year and next. This figure includes $1.172 billion for construction already begun and $485.5 million for projects scheduled for early ground-breaking and completion before 1962. In releasing results of its annual construction survey today (February 29), Manufacturing Chemists' Association reports that projects with a collective price tag of around $1.344 billion were completed in 1959. This brings total construction costs for the three-year survey period—1959-1961—to an estimated $3.002 billion. This represents a total of 820 projects by 318 companies in forty-two states.



**ELECTED BY PARENT COMPANY: Donald H. Francis, general manager of Maywood Chemical Company, Maywood, N.J., a division of Stepan Chemical Company, elected a vice-president of Stepan.**

The record total of $3.84 billion for a three-year MCA survey period was listed in the results released in 1958. Last year the total was $3.293 billion—more than $291 million of this year's figure.

**Sharp Gains Over '59 Survey**

The amount of money earmarked for planned construction and for facilities under construction is up more than $143 million over the similar figure in the 1959 survey.

The study covers the chemical industry itself and the construction of chemical-producing installations by firms identified primarily with other industries. Examples are the oil, rubber and paper companies.

Costs of foreign construction, government-financed construction, office, warehouse and similar separate service facilities are excluded from the survey.

A total of 290 projects being carried out by 149 companies in thirty-nine states accounts for the $1.172 billion in construction already under way.

The situation at this time last year showed 216 projects costing $1.05 billion under way in thirty-three states by ninety-eight companies.

The planned construction, to be completed before '62, includes 151 projects in thirty-four states at a cost of $485 million

—Continued on page 52

# Solar Has Big Plans For Itself During 1960

Before the year is out Solar Nitrogen Chemicals, Inc., will start up 25,000 tons a year of added capacity for ammonia, urea, nitric acid and nitrates at its Lima, Ohio plant. Although, moving ahead rapidly, the expansion has not yet been given a target date. So far the company has committed itself to nothing more precise than "during 1960."

Jointly owned by Atlas Powder Company and Standard Oil Company (Ohio), Solar says new facilities are needed to meet rapidly growing needs for ammonia, urea, and nitrogen solutions in the midwest.

The company's products are sold by Sohio Chemical Company as manufactur-

—Continued on page 52

# Union Carbide Will Hike Spending for Construction

Union Carbide Corporation expects to spend substantially more on construction in 1960 than the $136,600,000 spent last year, according to the New York company's annual report.

Biggest slice of the proposed capital outlay will be in chemicals, plastics and industrial gases, the company says.

The company's chemical sales last year were reported at $493 million, up from $411 million in 1958. Overall sales for the corporation totaled $1.5 billion, up from $1.3 billion in '58.

# Benzene Hexachloride, Warrior Against the Boll Weevil, Fights A Legion of Foes for Survival

Benzene hexachloride, tried and true warrior against the boll weevil throughout the cotton belt, these days finds itself involved in a battle for its life. Its opponents: rising costs, dropping prices, diminishing profits, stiff competition from other insecticides, declines in exports, mounting insect resistance, to name a few. BHC is conceded an adequate, if not excellent cotton poison. Nonetheless, it's being beaten in detail on all fronts. In 1951, BHC's peak year, 117 million pounds gross were made. In 1959, output had shrunk to 12.5 million pounds. Nine years ago, there were sixteen producers. Now, there are only five, and with the market as it stands, possibly only two will be left a short time hence.

**OPD Special Report**

What can happen to a good insecticide, such as BHC, that will bring it to such a low estate? Looking backward at the shambles, men both in the business and very recently out of it, regret not having spent enough money on promotion. This oversight has lost them the ball game, some feel.

**Efforts Now Being Made**

During the last couple of years, producers have made an attempt to lock the barn by socking in some more promotional money. Many—particularly those who have given it up—feel the effort is too little and perhaps too late.

When BHC was in its halcyon days, back in the early fifties, demand was so strong that trucks were hijacked. Mississippi alone in a normal season consumed 66 million pounds of dust. BHC in combination with DDT and sulfur ruled the roost.

Then in 1950-51, the sulfur shortage caused the government to recommend mixtures which excluded sulfur. Agricultural research stations recommended new formulations, new insecticides.

Result: "These people in the stations," one BHC producer opines, "like to do their work on new things, because they're more likely to get recognition that way than if they were to work on something old hat like BHC."

Hence, while BHC producers sat on their hands, along came toxaphene, endrin, dieldrin, heptachlor, methyl parathion, parathion, malathion, and other insecticides—all heavily promoted.

Many of the newer materials have carved handsome chunks out of BHC's

—Continued on page 33

## BHC PRODUCTION (GAMMA ISOMER)

| | |
|---|---|
| 1960 | *3.1 million lbs. |
| 1959 | *3.1 million lbs. |
| 1958 | 6.5 million lbs. |
| 1957 | 7.3 million lbs. |
| 1956 | 14.7 million lbs. |
| 1955 | 10.7 million lbs. |
| 1954 | 11.5 million lbs. |
| 1953 | 8.8 million lbs. |

*Industry Estimate
Source: Tariff Commission

# Monsanto After Leadership In 105 Percent Phosphoric

Monsanto Chemical Company plans to become the first commercial producer of 105 percent phosphoric acid. Construction of a plant for output of the acid will get underway immediately at Addyston, Ohio, the St. Louis, Mo., company discloses.

Forty percent more concentrated than conventional acid, Monsanto's product is said to offer at least two key advantages:

- It can be handled at normal usage temperatures.
- High concentration brings cost savings in both shipping and handling.

Trade-named "Phospholeum," the product will be marketed as a natural dessicant, and also as a sequestrant for common trace minerals such as calcium, aluminum and magnesium.

# Pesticides Not Hurt By Blast at Diamond

The blast last fortnight at Diamond Alkali Company's Newark, N. J., pesticide plant will not interrupt deliveries of 2,4-D or 2,4,5-T. Facilities for production of these two major insecticides were knocked out, but the Cleveland, Ohio, company, will have them back in full operation a week from today (March 7).

Meanwhile, stocks at Des Moines, Iowa, and Newark are ample, the company says.

Hit harder by the explosion were facilities for chloral and other intermediates. The firm has some backlog of chloral at Houston, Tex., but not enough to outlast the expected shutdown. Also on the light side are stocks of hexachloral benzene. Not all deliveries of these materials can be met, a spokesman for the company reports.

Other intermediates needed for production of insecticides will have to be purchased while the plant is being repaired. The company says it is having no trouble acquiring these materials. Names of the materials have not been disclosed.

The market picture for chloral and hexachloral benzene will not be affected, trade sources note, as three other firms manufacture them.

**IN SALES POSITION: Vernon Woodside, appointed manager of sales development for heavy chemicals by Olin Mathieson Chemical Corporation, Baltimore, Md.**

# Polyethylene Film, It Seems, Has a Green Thumb

Will polyethylene film speed the growth of trees?

Made into a mulch, the plastic appears to have a green thumb, especially for nursery stock, fruits and ornamentals. That's the thinking of Union Carbide Plastics Company after completing preliminary tests at its research farm in Clayton, N.C.

These tests, reports the Union Carbide Corporation division, have shown significant increases in tree growth through use of black polyethylene film mulch packed around the base of the tree.

In a broader scale program, now underway, both fruit and decorative trees are being grown under carefully controlled conditions to determine the effects of polyethylene mulching.

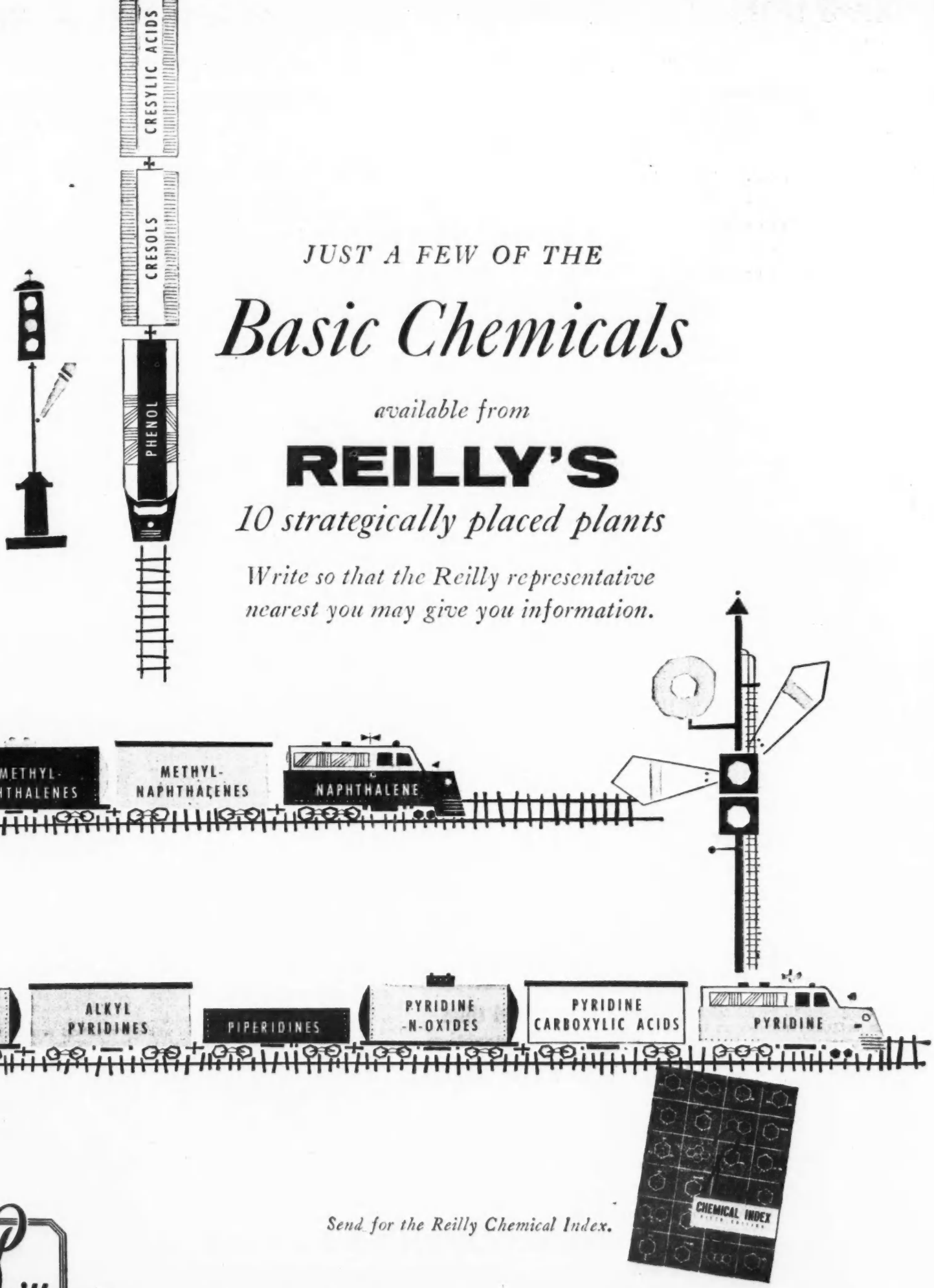
In the earlier tests, there were no survivals among non-mulched oak trees, while mulched trees not only survived but showed a high average gain of .017 inches, Carbide reports.

V. A. Clarkson, Carbide's horticulturist in charge of the testing program, says it will be continued for several years to confirm, amplify and refine information already obtained.

Among the plastic's plus factors on the horticultural scene are these, Mr. Clarkson says:

- Polyethylene film helps preserve moisture in the soil and prevents growth of weeds, which compete for water and soil nutrients.
- The plastic serves to moderate both winter and summer soil temperatures.
- Fertilizer leaching from irrigation or rainfall is effectively prevented.

Covering 250 acres, the Clayton farm is devoted to experiments aimed at improving agricultural production.

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**MOVES UP: Dr. John W. Ryznar, vice-president and technical director of Nalco Chemical Company, Chicago, named to the newly-created post of technical representative in corporate management.**

## ACS Meeting to Run The Scientific Gamut

Latest discoveries in the fields of mental drugs, water de-salting and radioactive fallout highlight the advance program of the American Chemical Society's 137th national meeting, scheduled to start April 5 in Cleveland, Ohio.

Other topics up for detailed treatment by the convening chemists include germ warfare, chemical research on fertility and sterility and new microscopic techniques for crime detection.

Recovery of drinkable water from body wastes a project important to space travel will be described in a symposium by authorities from several fields. Other panel discussions will cover heat-resistant lubricants for missiles and new knowledge about the nature and origin of the solar system.

More than 1,100 technical papers will be presented in sessions scheduled by twenty of the society's divisions in chemical science and technology. About 7,000 chemists and chemical engineers are ex-

*—Continued on page 52*

## Oil Trades Group Slates Meeting, Officers' Election

Oil Trades Association of New York will hold its annual meeting and election of officers March 23, at the Waldorf-Astoria hotel in New York. Table reservations must be secured by March 18.

Regular nominees are: President, R. F. Hannan, California Commercial Company; vice-president, R. Hebert, sr., J. H. Redding, Inc.; secretary, Joseph C. Smith, Smith-Weihman Company; and treasurer, D. E. Hoffman, Tidewater Oil Company.

# Pesticide Regulations Labeled Strong Enough to Give Public All the Protection It Requires

Leave it up to the government—federal and state laws now on the books are adequate to protect the public against potentially harmful effects of pesticides. This assurance comes from J. V. Vernon, vice-president of Food Machinery & Chemical Corporation and president of the National Agricultural Chemicals Association. Addressing the annual meeting of the American Institute of Chemical Engineers in Atlanta, Ga., last week, Mr. Vernon cited the industry's own high standards as an extra safeguard for the public.

"My observations are that the strict requirements of both federal and state laws are adequate to protect the American people," he said. "I can assure you that the industry's standards are high in this regard."

**Government Backs Up Industry**

Mindful of oft-repeated charges that pesticides are a menace to wildlife, Mr. Vernon pointed to statements on the public record by government experts, backing up the industry.

The California Department of Fish & Game Management, he noted, has stated that pesticides are "only minor influences in nature."

Quoting Department of Health, Education & Welfare officials, he went on to say, "There is nothing to be gained in the long run, however, by irresponsible statements that nothing is now known of the toxicology of the newer pesticides, or that no legal control of their use now exists, or in the absence of epidemiological proof —that a wide variety of illnesses from which mankind has suffered for generations is now caused by intoxication by the new economic poisons."

Mr. Vernon applauded the key role played by pesticides in today's dynamic farm economy. "The pesticide industry," he reminded his audience, "has grown from an annual $30 million business twenty-five years ago to $280 million today."

"Products of this segment of the chemical industry," he went on to note, "are

*—Continued on page 33*

## Naval Stores Price Props Fixed by Agriculture Dep't

Department of Agriculture last week announced 1960 price supports for gum naval stores.

The 1960 support level will be $28.93 per standard barrel of pine gum, process basis, the same as for 1959.

The initial rates under USDA's loan program will be 50 cents a gallon of gum turpentine, bulk, $7.97 per 100 pounds of gum rosin applicable to the average, WG grade, with rates 15 cents higher for grades X and WW, and 25 cents for grades N, M and K.

The loan rates applied in turpentine and rosin may be revised from time to time at the discretion of the Commodity Credit Corporation, but the announced support levels per standard barrel gum will be maintained.

**ON MERCK BOARD: Dr. Chester S. Keefer, named a director of Merck & Co., Rahway, N.J. Dr. Keefer is director of the Medical Center of Boston University - Massachusetts Memorial Hospitals and president-elect of American College of Physicians.**

## Tenn. Eastman Liked '59 Chemical Climate

It was a good year last year for plastics, man-made fibers and industrial chemicals, says Eastman Chemical Products, Inc. The Eastman Kodak Company subs'diary reports that sales of all three lines of chemicals scored sharp advances during 1959.

Leading the way during the year were cellulose esters, followed by plasticizers, textile dyes and rubber chemicals. And, the Kingsport, Tenn., firm found nothing wrong with the business picture for "Tenite" acetate, butyrate and propionate plastics.

Thanks to the boom in filter cigarettes, acetate fiber sales climbed to a record level.

Amid all the prosperity, one soft spot showed up: Owing mainly to decreased business in lofted yarn for carpets, acetate yarn sales declined from the '58 level.

Sales of "Tenite" polyethylene plastic

*—Continued on page 53*

# Drug Scientist Terms Research No Easy Road

Too often pharmaceutical houses tell only their success stories, the dramatic breakthroughs in research—while nothing is said of the many and costly failures. This may be partly responsible for the recent spate of adverse criticism originating in Sen. Estes Kefauver's anti-monopoly subcommittee hearings on drug prices, says a top industry spokesman.

Dr. C. Wesler Scull, director of development for Smith, Kline & French Laboratories notes that critics of pharmaceutical research have based their thinking on either a "mystical" or "mechanical" approach, both of them erroneous.

His defense of the industry came in a speech last week before the annual joint pharmacy seminar at Wayne State University in Detroit, Mich.

**Research Not Just Discovery**

Research is not confined to discovery alone, the Philadelphia scientist said, "but extends to the study of how the discovery can be made of practical value. Recognition plays as important a part as discovery."

This, he feels, refutes the "mystics" who believe that a new pharmaceutical product results solely from "a flash of genius," and that the drug company's follow-through is just "me-too" research.

"We call research leading to secondary discoveries development—a term that to some people has the derogatory connotation of unoriginal, routine hack work," he said. "Yet much original and creative work in the pharmaceutical industry occurs in developing a drug—in the clinical, pharmacological and pharmaceutical research necessary to transform a new chemical compound into a usable, worthwhile medication."

In contrast to the success stories of the last stages of creation and development which are often trumpeted, "we hear much less about the halting starts—projects that are wide of the target. We rarely hear anything at all about projects which arrive, but with little, too late, and turn out

*—Continued on page 38*

## Acetylene Cracking Plant To Be the First in France

France's first acetylene cracking plant, using methane extracted from cokeoven gas, has been put on-stream at Carling, Moselle, by Houillieres du Bassin de Lorraine, Merlebach.

The unit is said to be the first in the world to use a process developed by Belgium's Azote Company.

Output from the Carling facility is being made into acrylonitrile by Ugilor, a joint subsidiary of the Ugine group and Houillieres.

Start-up of the unit brings Ugilor closer to achieving its targeted output of 10,000 tons a year of acrylonitrile.

# *Association Meetings*

American Chemical Society, national meeting, Cleveland, Ohio, April 5-14.

American Institute of Chemists, annual meeting, Radisson hotel, Minneapolis, Minn., May 12-14.

American Oil Chemists' Society, annual meeting, Baker hotel, Dallas, Tex., April 4-6.

American Zinc Institute, annual meeting, Chase-Park Plaza hotels, St. Louis, Mo., April 7-8.

Animal Health Institute, annual meeting, Shoreham hotel, Washington, D. C., April 17-19.

Association of Consulting Chemists & Chemical Engineers, dinner and forum, Shelburne hotel, New York, April 13; annual meeting, Shelburne hotel, New York, October 25.

Association of Southern Feed & Fertilizer Control Officials, annual meeting, Riverside hotel, Gatlinburg, Tenn., June 21-22.

Chemical Market Research Association, national meeting, Pittsburgh Hilton Hotel, Pittsburgh, Pa., November 9-10.

Chemical Specialties Manufacturers Association, midyear meeting, Drake hotel, Chicago, May 16-18.

Chemurgic Council, annual conference, Sheraton-Park hotel, Washington, D. C., March 16-18.

Commercial Chemical Development Association, annual meeting, Plaza hotel, New York, March 16-17.

**Drug, Chemical & Allied Trades Association, annual dinner, Waldorf-Astoria hotel, New York, March 3.**

Electrochemical Society, LaSalle hotel, Chicago, May 1-5.

**Federal Wholesale Druggists Association, midyear meeting, Statler-Hilton hotel, New York, March 3-4.**

Federation of Societies for Paint Technology, annual meeting, Sherman hotel, Chicago, October 31-November 2.

Lead Industries Association, annual meeting, Chase-Park Plaza hotels, St. Louis, Mo., April 6-7.

Manufacturing Chemists' Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 9-11.

National Agricultural Chemicals Association, annual meeting, Del Coronado hotel, Coronada, Calif., September 27-29.

National Paint, Varnish & Lacquer Association, annual convention, Drake hotel, Chicago, October 27-29.

National Foreign Trade Council, national meeting, Waldorf-Astoria hotel, New York, November 14-16.

National Petroleum Association, semi-annual meeting, Sheraton-Cleveland hotel, Cleveland, Ohio, April 20-22.

National Plant Food Institute, annual convention, Greenbrier hotel, White Sulphur Springs, W. Va., June 12-15.

Oil Trades Association of New York, Waldorf-Astoria hotel, New York, March 23.

Parenteral Drug Association, scientific meetings, Warwick hotel, Philadelphia, April 29; Edgewater Beach hotel, Chicago, June 24; Annual convention, Statler hotel, New York, October 19-21.

Pharmaceutical Manufacturers Association, annual meeting, Boca Raton hotel and club, Boca Raton, Fla., April 4-7.

**Pittsburgh Conference on Analytical Chemistry & Applied Spectroscopy, Penn-Sheraton hotel, Pittsburgh, Pa., February 29-March 4.**

Society of the Plastics Industry, western sectional conference, New Riviera hotel, Palm Springs, Calif., April 8-9; Canadian section conference, London hotel, London, Ont., April 25-26; national conference and annual meeting, cruise on the Queen of Bermuda, May 7-13.

Southern Paint & Varnish Production Club, annual convention, Atlanta Biltmore hotel, Atlanta, Ga., March 16-19.

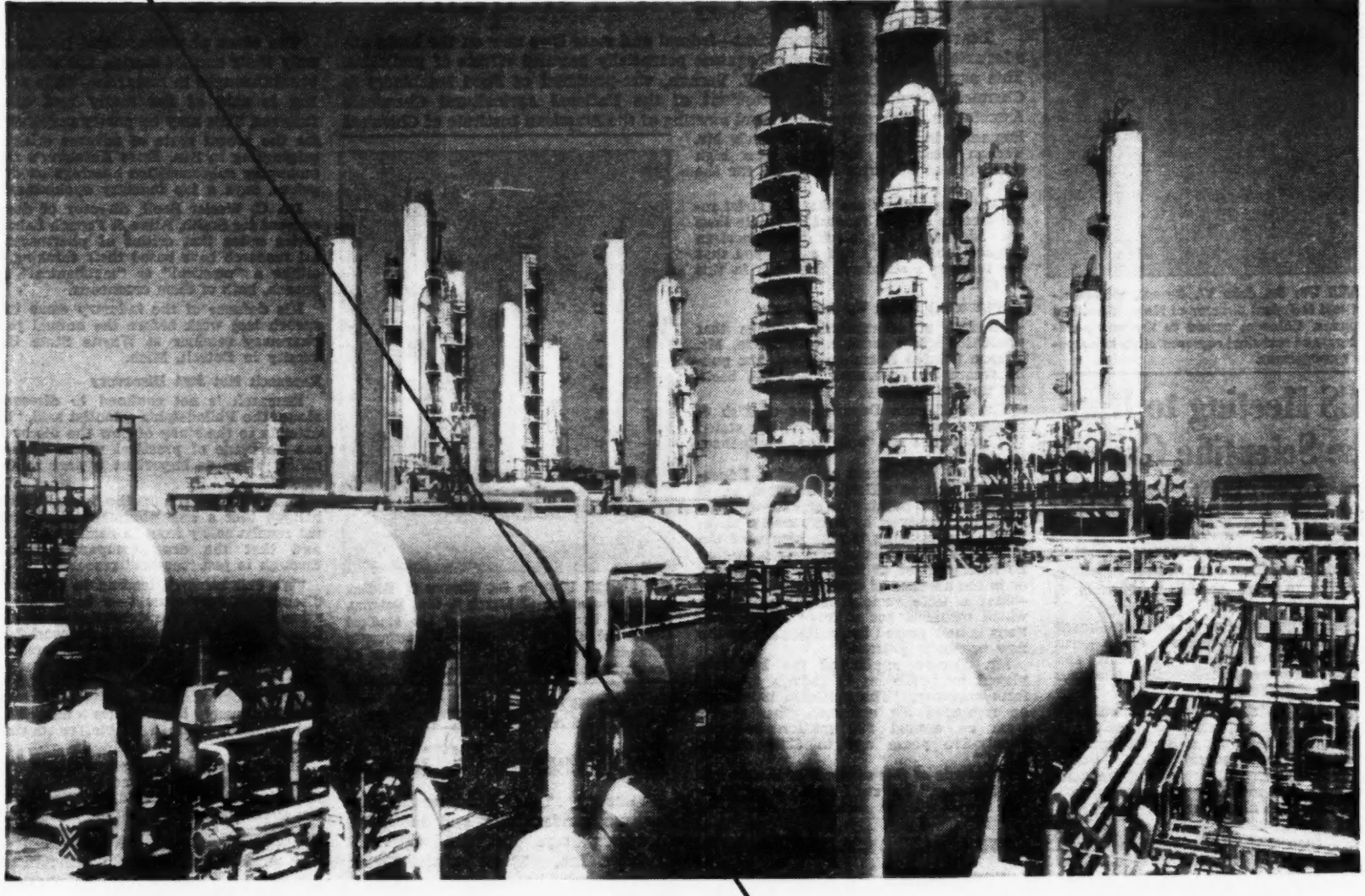
Stanford Research Institute, symposium on chemical reactions in the lower and upper atmosphere, Mark Hopkins hotel, San Francisco, April 18-20.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, March 15.

Textile Research Institute, annual meeting, Commodore hotel, New York, March 24-25.

Toilet Goods Association, scientific section, spring meeting, Waldorf-Astoria hotel, New York, May 11; annual meeting, Poland Spring House, Poland Spring, Maine, June 27-29.

# *tank-car delivery of DIISOBUTYLENE*



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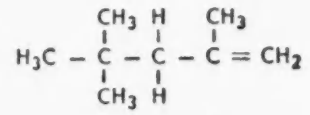
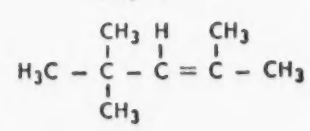


and 2,4,4-trimethylpentene-2



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Volume 177 February 29, 1960 No. 10


## Policy Views Differ

Much of the difference between the views of businessmen and those of members of congress on matters of national policies lies in two categories. One of these can be designated "Welfare State or Democracy"; the other, "Nationalism or Individualism." The differences between the legislative and the executive branches of the federal government may be similarly listed, but the underlying influences are not the same.

It is difficult to the verge of impossibility to forecast—even to guess—what the politically motivated legislators will do—or will not do—in an election year session with the peculiar aspects of the current one. It is clear that their leaders are going to push for an increase in the minimum wage figure, an extension of the coverage—and the cost—of the social security program, assistance for localities which have chronic economic maladies, and school aid. Political expediency will be a big factor in all those and in civil rights attitudes.

It has been made clear in the here, there, and elsewhere sessions of the Arcade for Congressional Action sponsored by the Chamber of Commerce of the United States that the views of business—as a political factor—do not go along with those who are looking upon the current congressional session as a vote-getting, more than a lawmaking project.

According to the C of C president at a recent arcade session, "When we appraise a bill or resolution, we try to look at it from the viewpoint of its effect on the total economy." The significance of that depends, of course, upon who does the totaling.

One does not get much, if any, reminding that this is an election year by way of the arcade's opposition to federal aid to education, farm price supports, compulsory health care and other social security extensions, and aid for depressed areas. He gets still less reminding by its favoring of placing of labor unions under the antitrust laws, stronger federal provision against "feather-bedding," and tax "reform," and he will have difficulty in reconciling at least some of those positions with the arcade's declaration that it was not asking for legislation which could be defined as "pro-business" or "anti-anybody."

Businessmen in municipalities visited by the C of C arcade could do their own and the "total" economy a very good turn if they would do even a fair job of appraising what their locality got or could expect to get as a result of the arcade sessions. Talk is one thing—sometimes a very big thing—what it does is not always anything nearly the same in any respect. But, that is what counts.

## Chemicals for Canada

February 29 is the last day for the filing by interested parties with the Canadian tariff board of proposals relative to the grouping for hearings of the several score of chemicals and products basically related to chemicals or plastics covered by an extension of its investigation into rates and drawbacks governing the import of such products. Some forty items have been added to the 125 contained in the directive issued by the board early in January, 1957.

March 15 is the last day for the filing with the board of information of a purely general character about the chemical industry, and proposals for the general revision of the nomenclature of the tariff items. Canadian producers are reported to have a liking for the Brussels nomenclature. Those who intend to be present at the first public hearings, May 2, should notify the secretary of the board not later than March 15. That hearing will be for the presentation of purely general information about the industry and views of a general character relative to the rate structure pertaining to the chemicals under consideration, and to nomenclature. The hearing will not have anything to do with representations on the wording of individual tariff items or on the rates of duty applicable to particular items or groups of items.

The tariff board requires that it be provided with 250 copies of each submission or proposal. Copies of such filings may be obtained in due course at request from the secretary of the board in Ottawa.

The schedule of basically related products includes products of petroleum. It does not include coal. The National Coal Association (US) has asked that Canadian protective tariffs be removed from imports of coal from this country. Continuation of those tariffs, it was declared, would induce the US industry to "seek the protection of its government in whatever form seems most effective, including the imposition of substantial duties on the importation of energy, such as natural gas and electricity into the United States."

Another angle of the trading between the United States and Canada, especially in the chemical field, was presented about mid-January when the governor of the Bank of Canada, warning that the country was "living beyond its means," hinted that it would be desirable to limit the rate of US dollar investment in Canada. In an earlier expression of opinion, the Finance Minister said that Canada will need capital from abroad "unless we are prepared to be content with a much slower rate of development of our resources." Those are pertinent sentiments to be kept in mind by all those from this country who, in person or in presentation, participate in the Canadian tariff program.

## Challenge for Plastics

A congressman, whose face was cut about two months ago when a thrown rock shattered the glass of a window in a railroad passenger car, has been informed by the chairman of the Interstate Commerce Commission that he has no authority to take any remedial or preventive action in such a matter. So, the legislator, quite naturally, has arrived at the conclusion that something should be done about it.

He did not get very far with the ICC head in the early stages of his interest in safety. He asked whether the commission regulated the kind of glass used in passenger car windows and whether such regulation was thought to be advisable. All he got was comment by the chairman that "bullet-proof glass" would "entail an expenditure not so commensurate with the degree of risk involved or with past experience with respect to the frequency of occurrence of such accidents." Verbosity is one of the major assets of bureaucracy.

The inquirer admitted that such accidents do not happen every day, but that they have been and are sufficiently frequent to justify regulation. The victim also pointed out that he was not concerned with bullet-proof glass but with shatterproof glass such as is used in automobile windshields. He was told that the ICC chief had not intended to imply that the risk should be disregarded, and that further study would be given to the shatterproof proposal. The legislator thereupon declared that, if such study led to a conclusion that effective regulation is advisable, he would give appropriate consideration to the sponsoring of federal legislation to extend ICC authority so as to enable it to do the necessary regulating.

The situation offers a clear challenge to the plastics industry, which already has done much good by way of the development of the laminated safety glass used in windshields. It can develop a fully satisfactory shatterproof substitute for glass of the type used in passenger vehicles on railroads, highways, or airplanes. It has "the makings." It has the ability to "do wonders" with them. It should, starting today, assign to its very capable research departments the public welfare task of putting an end to any and all possibilities of hazardous window shatterings.

## OPD'S BOOKSHELF

### Plastic Maker's Guidebook

This revised edition of PLASTICS ENGINEERING HANDBOOK* features considerable new material. Describing every step in the manufacturing process, the book profits from the know-how and experience of some 200 technicians and authorities. Virtually every method of processing and application of plastics is covered in detail. How to work with various grades of plastics is also discussed.

*PLASTICS ENGINEERING HANDBOOK, THIRD EDITION. The official handbook of the Society of the Plastics Industry, Inc. 555 pages. Reinhold Publishing Corporation, New York. $15.

### Museum Pieces

Skipping past the detailed account of operations and business affairs found in the first half of the SMITHSONIAN INSTITUTE'S ANNUAL REPORT*, chemical trade people will find the general appendix, comprising the second half of the book, a gold mine of up-to-date and interesting scientific articles. Articles in the 1958 annual report, just off the press, offer the latest information on rocketry, earthquakes, fresh water production, the sun's energy, the ecology of man, the Smithsonian's Caribbean Expedition and other subjects.

*ANNUAL REPORT OF THE SMITHSONIAN INSTITUTION, 1958. 599 pages. US Government Printing Office, Washington, D. C. $3.75.

### The German Dye Industry

Joseph J. Beer's THE EMERGENCE OF THE GERMAN DYE INDUSTRY* does much to sweep away many of the myths surrounding Teutonic chemical prowess. A no-nonsense account of how Germany became a formidable chemical nation, Mr. Beer's careful study shows, among other things, that its dominance of the dyestuffs field is more a triumph of opportunism than of native invention. Though it ends with the conclusion of World War I, Mr. Beer's review of dyestuffs history offers this clear-cut lesson for technological laggards today: The Germans are a resourceful people and are ready and able to exploit any and all chemical developments, whether their own or someone else's.

*THE EMERGENCE OF THE GERMAN DYE INDUSTRY. Illinois Studies in the Social Sciences: Vol. 44. 168 pages. University of Illinois Press, Urbana, Ill. Clothbound, $4.50; paperbound, $3.50.

## Washington Talks It Over

### US Pharmaceutical Industry, Sorely Beset by Sen. Estes Kefauver and His Drug-Price Probers, Is Now Running Into Harassment From a New Quarter: Fidel Castro's Cuba

By Arthur R. Kavaler

As if Sen. Estes Kefauver and his drug-price probers weren't enough to contend with, the US pharmaceutical industry is now running into harassment from a new quarter: Premier Fidel Castro's tightly-held island of Cuba.

Last week, for instance, the Castro government decreed that all pharmaceuticals must be packaged or repackaged in Cuba for sale to the public.

Firms shipping finished drug preparations to Cuba have six months in which to comply with the new measure.

Just how large an economic jolt this is is seen from the fact that some $37.5 million worth of pharmaceuticals were sold in Cuba in 1959.

Of this sales total, American, Canadian and European companies accounted for better than 40 percent—or $14.7 million worth. About four-fifths of all drug products brought into Cuba last year came from US concerns.

Many US drug houses have manufacturing and packaging installations on the island, but a good number of them do not. And even those firms that do operate in Cuba are hardly free of troubles.

For one thing, containers are scarce and the outlook is bleak—particularly for those made of glass.

Then, there's the matter of the Cuban law on drug profits. This statute, which could have been written by Sen. Kefauver himself, requires all pharmaceutical makers to file with the government the production costs of each of their ethical drug preparations. This data is then used to calculate the selling price for each drug on the market.

What's next? Casting a sidelong glance at the ruinous imposts levied on American mining firms operating in Cuba, the drug producers just shudder at the thought.

The only ray of hope comes from the State Department, which indicates that it is agreeable to a Cuban proposal to start negotiations aimed at clearing up differences between the two countries.

*Ralph L. Cherry, who regularly writes Washington Talks It Over, is ill.*




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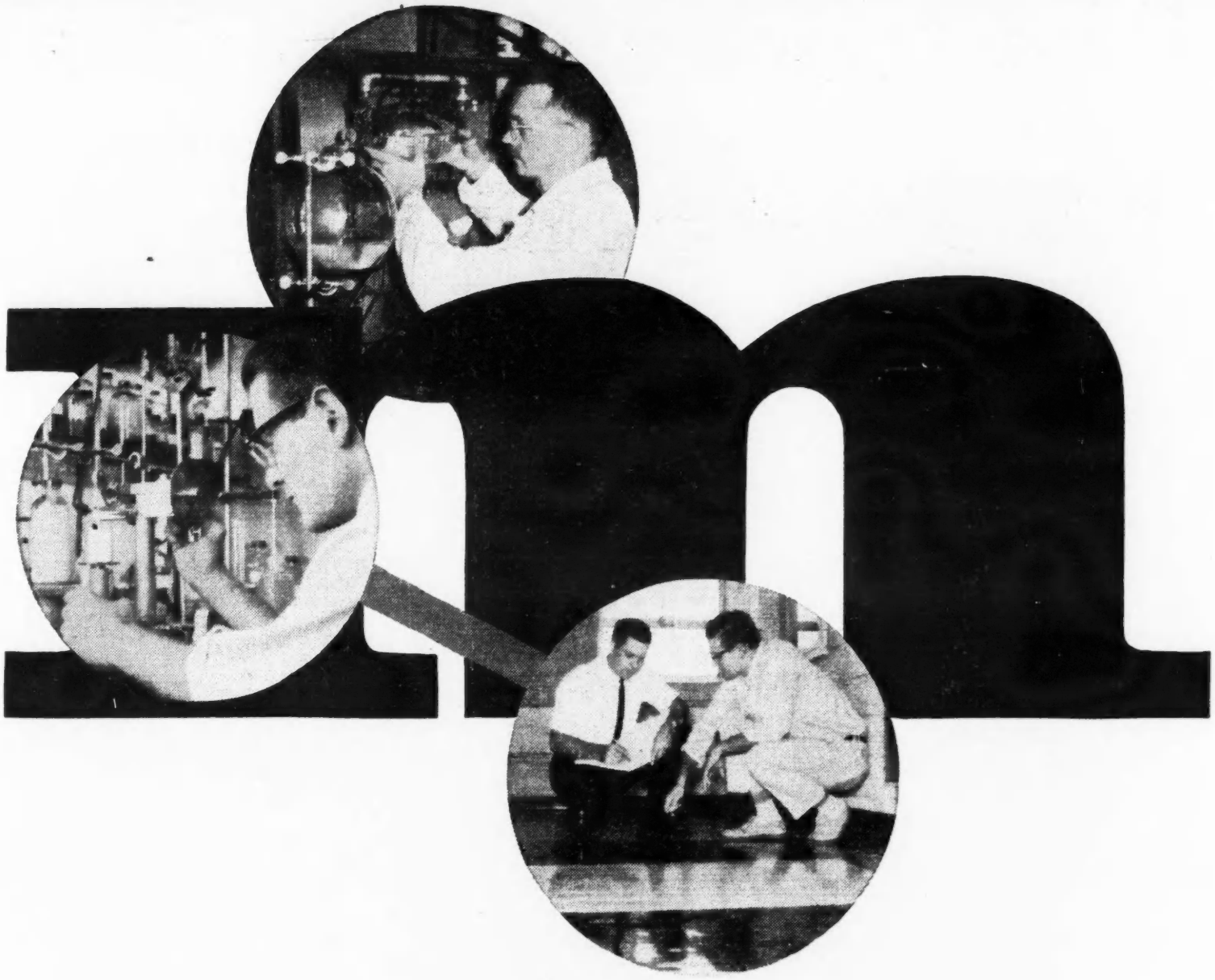

# Morton . . . symbol of leadership in polymer floor polish development

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# CHEMICALS AND RELATED MATERIALS

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# Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, February 26 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

## A

Abies siberica oil, cns ..... lb. 1.90 - 2.50
Acacia (see Arabic gum).
Acenaphthene, below 92.5 C. m.p., dms., works lb. .40 - —
Above 92.5 C. m.p., bbls. dms., works lb. .41 - .50
Acetaldehyde, 99%, dms., c.l., works, lb. .12 - —
dms., l.c.l., works ..... lb. .13½ - —
tanks, works ..... lb. .10 - —
Acetaldol (see Aldol).
Acetanilide, tech., flaked, bbls., bgs., c.l., frt. alld lb. .32½ - —
bbls., bgs., ton lots, frt. alld. lb. .33½ - —
bbls., bgs., smaller lots, frt. alld lb. .35½ - —
USP, bbls. 225-lb dms. any quantity lb. .79 - —
100-lb dms., any quantity lb. .81 - —
Acetic acid, coml. or reagt., 28%, bbls 100 lbs. 4.80 - —
56%, bbls. ..... 100 lbs. 8.25 - —
70%, bbls. ..... 100 lbs. 9.95 - —
80%, bbls. ..... 100 lbs. 10.45 - —
Acetic acid, glacial, syn., CP, dms., dlvd 100 lbs. 22.00 -23.00
tech., dms., c.l., dlvd. ... 100 lbs. 13.75 - —
dms., l.c.l., dlvd. ..... 100 lbs. 15.25 - —
tanks, dlvd ..... 100 lbs. 10.00 - —
USP, cbys., dlvd ..... 100 lbs. 31.00 -32.00
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E. lb. .16½ - —
aluminum ret. dms., l.c.l., dlvd E. lb. .18 - —
tanks, dlvd. E. ..... lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
fib. dms., l.c.l., dlvd. ..... lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb. 1.35 - —
fib. dms., l.c.l., dlvd. ..... lb. 1.36 - —
Acetoacet-o-toluidide fib. dms., c.l., dlvd lb. .82 - —
fib. dms., l.c.l. dlvd. ..... lb. .83 - —
Acetone, CP, dms., c.l., dlvd. ... lb. .11 - —
dms., l.c.l., dlvd. ..... lb. .12½ - —
tanks, dlvd. ..... lb. .08½ - —
Acetonitrile, dms., c.l., works ... lb. .45 - —
dms., l.c.l., works ..... lb. .45¾ - —
tanks, works ..... lb. .43 - —
Acetophenetidin, USP, 200-lb. dm., 1,000 lbs., frt. alld lb. 1.22 - —
100-lb. dm., 1,000 lbs., frt. alld. lb. 1.24 - —
Acetophenone, cns., dms. ..... lb. .42 - 1.30
Tech., dms., c.l., works ..... lb. .37 - —
dms., l.c.l., works ..... lb. .37¾ - —
tanks, works ..... lb. .35 - —
N-Acetyl-p-aminophenol, dms., t.l. (min. 23,000 lbs.), frt. adjusted .. lb. 1.24 - —
dms., smaller lots, same basis .. lb. 1.35 - 1.63
dms., 5,000-lb. lots, same basis .. lb. 1.30 - 1.45
Acetylene black, imp., bgs., c.l., duty and freight extra lb. .19 - —
es., l.c.l., ex whse. ..... lb. .24½ - .30
Acetylene tetrabromide, 16-dm. lots or more, f.o.b. works lb. .53 - —
Acetylsalicylic acid, USP, special, makers, primary distr., bbls., 1,000-lb. lots, point of shipt lb. .63¼ - —
USP, standard, fine, cryst. gran., (20-40 mesh) powd., (60 mesh), 250-lb. bbls., c.l., t.l., same basis lb. .55¼ - —
Freight equald, shipt. identical quantity over standard routes, from N. Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .35½ - —
non-ret. dms., l.c.l., frt alld. E. of Denver lb. .36½ - —
tanks, frt. alld. E. of Denver. lb. .33 - —
tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½ - —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .40½ - —
tanks, frt. alld. E. of Denver. lb. .37 - —

### ACIDS

**Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.**

Aconite root, bls. ..... lb. .50 - .55
Acrolein, tech., dms., c.l., works lb. .51 - —
dms., l.c.l., works ..... lb. .51¾ - —
tanks, works ..... lb. .49 - —
Acrylamide, dms., t.l., f.o.b. works, lb. .58 - —
dms., l.t.l., same basis ..... lb. .60 - —
Acrylic acid, glacial, dms., c.l., t.l., frt. alld lb. .57 - —
dms., l.c.l., l.t.l., frt. alld ... lb. .58 - —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. .26 - —
dms., l.c.l., l.t.l., frt. alld ..... lb. .27 - —
tanks, frt. equald ..... lb. .23 - —

## Abies Siberica Oil—Ammonium Bifluoride

Adeps lanae (see lanolin).
Adipic acid, bgs., c.l. dlvd. ..... lb. .32¼ - —
bgs. l.c.l. dlvd. ..... lb. .35 - —
Agar, USP, Kobe No. 1, strip, bls. lb. 2.25 - 2.35
powd., 30 mesh, fib. dms lb. 2.40 —
dl-Alanine, dms., 100-lbs or more, f.o.b. works lb. 5.25 - —
dms., 1-99 lbs., same basis lb. 10.00 - —
Aldol, 95%, dms., l.c.l., works lb. .28 - —
Aldrin, tech. fib dms. c.l., t.l., dlvd lb. .99 - —
fib. dms., l.c.l., dlvd ..... lb. 1.04 - —

### ALCOHOLS

**Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.**

Aletris root, bgs ..... lb. 1.50 - 1.75
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. E of Rockies lb 2.38 - —
Alkali blue, toner, litho flushed, 125-lb. bbls, same basis. lb. 1.35 - —
Alkali blue prices 1c. higher W of Rockies
Allethrin, 90% dms., frt. alld lb. 28.80 -28.90
Soln. 20% dms. 200-2,000 lb. lots, frt. alld lb 6.50 6.55
2½% dms. frt. alld. ..... lb. .95 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms. c.l. dlvd. ... lb. .32½ - —
dms., l.c.l. dlvd ..... lb. .34 - —
tanks, dlvd. lb. .30 - —
Allyl bromide 55-lb. cbys. 5,005 lbs. or more works lb. 1.47 - —
55 lb. cbys., 1,045 to 4,950 lbs., works lb. 1.52 - —
55-lb cbys. 55 to 930 lbs works. lb 1.57 - —
Allyl chloride, dms. c.l. dlvd. lb. .17½ - —
dms., l.c.l., dlvd ..... lb. .19 - —
tanks, dlvd lb. .15 - —
Allyl isocyanate (see Mustard Oil, syn.)
Almond oil, artif., bitter (see Benzaldehyde).
Almond oil, nat., bitter, f.p.a., bots. lb 2.75 3.45
NF, bots. ..... lb 3.00 3.30
sweet, USP, cns., dms ..... lb. .70 - 1.30

## Abbreviations

### Used in OPD Market Quotations

| | |
|---|---|
| alld | allowed |
| amorph | amorphous |
| AMP | American melting point |
| anhyd. | anhydrous |
| AOAC | Association of Official Agricultural Chemists |
| a.p.a. | available phosphoric acid |
| approx. | approximately |
| artif | artificial |
| ASTM | American Society for Testing Materials |
| Atl. | Atlantic |
| Be. | Baume |
| bbls. | barrels |
| bgs. | bags |
| bls. | bales |
| bots. | bottles |
| b.p. | boiling point |
| b.p.l. | bone phosphate of lime |
| b.r. | boiling range |
| bxs. | boxes |
| C. | centigrade |
| cbys. | carboys |
| CD | completely denatured |
| c.i.f. | cost, insurance, freight |
| cks. | cacks |
| c.l. | carlots |
| cns. | cans |
| coml. | commercial |
| conc. | concentrated |
| CP | chemically pure |
| cps. | centipoises |
| cryst. | crystalline |
| cs. | cases |
| ctns. | cartons |
| cyls. | cylinders |
| d- | dextro |
| dbl. | double |
| denat. | denatured |
| dest-dist. | destructively—distilled |
| dl- | dextrolaevo |
| dist. | distilled |
| distr. | distributor |
| djns. | demijohns |
| dlvd. | delivered |
| dms. | drums |
| dom. | domestic |
| E | east |
| e.p. | end point |
| equald. | equalized |
| exp. | expressed |
| Ext. | external |
| F. | fahrenheit |
| ferment. | fermentation |
| f.f.a. | free fatty acid |
| f.f.c. | free from chlorine |
| fib. | fiber |
| f.o.b. | free on board |
| f.p.a. | free of prussic acid |
| frt. | freight |
| gal. | gallon |
| gran. | granular |
| grd. | ground |
| i.&a. | iron and aluminum |
| i.b.p. | initial boiling point |
| imp. | imported |
| incl. | included |
| indust. | industrial |
| kgs. | kegs |
| l- | laevo |
| lacq. | lacquer |
| lb. | pound |
| l.c.l. | less than carlots |
| l.t.l. | less truckload |
| liq. | liquid |
| mfrs. | manufacturers |
| m- | meta |
| m.a.p. | mixed aniline point |
| min. | minimum |
| m.p. | melting point |
| N- | nitrogen |
| n- | normal |
| nat. | natural |
| neut. | neutral |
| NF | National Formulary |
| NNR | New and Nonofficial Remedies |
| No. | number |
| nom. | nominal |
| o- | ortho |
| ord. | ordinary |
| oz. | ounce |
| p- | para |
| Pac. | Pacific |
| pf. | proof |
| phos. | phosphate |
| photo. | photographic |
| pkgs. | packages |
| powd. | powdered |
| precip. | precipitated |
| prod. | producer |
| pt. | point |
| pulv. | pulverized |
| purif. | purified |
| redist. | redistilled |
| refd. | refined |
| refy. | refinery |
| reg. | regular |
| resub. | resublimed |
| ret. | returnable |
| SD | specially denatured |
| s.d. | single distilled |
| S.E. | southeast |
| sec. | secondary |
| secs. | seconds |
| s.g. | specific gravity |
| shipt. | shipment |
| soln. | solution |
| s.u. | standard unit |
| syn. | synthetic |
| tanks. | railroad tankcars |
| tech. | technical |
| tert- | tertiary |
| t.l. | truck loads |
| t.w. | tank wagons |
| USP | U. S. Pharmacopoeia |
| vis. | viscosity |
| VM&P | varnish makers & painters |
| W. | west |
| whse. | warehouse |
| w.w. | water-white |

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Aloe, Cape, cs ..... lb. .30 - .35
powd., cs. ..... lb. .60 - .65
Curacao, kgs. ..... lb. .60 - .70
powd., kgs. ..... lb. .80 — —
Aloin, USP, bbls., dms., kgs. ... lb 3.25 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene)
Alphapicoline (see a-Picoline).
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium, gran., bgs., works 100 lbs. 4.30 - —
lump, dms., works .... 100 lbs 5.05 - —
powd., dms., works .... 100 lbs. 5.20 - —
USP, burnt dms. ..... lb. .20 - .21
hydrous, dms. ..... lb. .07¾ - .08
Alum, potassium, gran., bgs., works. 100 lbs. 4.55 - —
lump, dms., works .... 100 lbs. 5.30 - —
powd., dms., works .... 100 lbs. 5.45 - —
USP, burnt., dms ..... lb. .20 - .21
USP, hydrous, dms ..... lb. .07¾ - .08
Alum, potash-chrome, dms. ..... lb. .17 - —
Alumina, calcined, bgs., c.l., works. lb. .05 - —
bgs., l.c.l., works ..... lb. .05¼ - .06
Aluminum acetate, basic soln., 24%, bbls., l.c.l., works lb. .14 - —
Aluminum chloride, coml., anhyd., dms., c.l., works, frt. equald lb. .16 - —
dms., l.c.l., works ..... lb. .16½ - —
cryst., dms., c.l. works 100 lbs. 21.00 - —
dms., l.c.l. works 100 lbs. 21.50 - —
Soln., 32° cybs., c.l., works ... lb. .0495- —
cbys., l.c.l., works ..... lb .0570- .1095
tanks, works ..... 100 lbs. 3.95 - —
NF, gran., dms., works ..... lb. .31 - .32
Aluminum fluoride, tech., anhyd., bgs., c.l., works lb. .17¼ - —
bgs., l.c.l., works ..... lb. .18¼ - .20¼
bulk, c.l., basis 80% ..... lb. .14½ - —
Aluminum fluoride in fib. dms. 0.35c per lb higher
Aluminum formate, basic soln., containers extra c.l., works. 100 lbs. 11.00 - —
containers extra l.c.l. works. 100 lbs. 11.50 - —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .03½ - —
bgs., 20,000-40,000 lb lots, same basis lb. .03¾ - —
bgs., 2,000-20,000 lb. lots, same basis lb. .04¾ - —
bulk, c.l., same basis lb. .03¼ - —
Aluminum hydroxide, dried, USP XV, fib dms., works lb. .82½ - —
fib dms., contract, works lb. .79½ - —
Aluminum hydroxide, gel, pharmaceutical, 14-15% $Al_2O_3$, fib. dms., works lb. .22 - —
9-9½% $Al_2O_3$, fib dms., works lb. .19 - —
fib dms., contract, works lb. .18 - —
Aluminum hydroxide, tech., powd. (See Aluminum hydrate).
Aluminum metal, 99%+ ingots, 10,000-lb. lots, frt. alld lb. .2310- —
pigs, 10,000 lb. lots, frt. alld lb. .26 - —
Aluminum oxide, amorphous (See Alumina, calcined).
Aluminum paste, lining, extra-fine, dms lb. .71 - —
Standard grade, dms ..... lb. .48½ - —
Aluminum powder, lining, extra-fine, dms lb. 1.13 - —
Standard grade, dms ..... lb. .83 - —
Aluminum paste and powder prices are f.o.b. shipping point. Add 1c per lb. for 100-lb dm., 1½c. per lb for 50-lb dm., 3c per lb. for 10 lb can and 5c. to 12c per lb for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs., 2c for 1,500 to 4,999 lbs., 3c for 5,000 to 29,999 lbs. and 4c for 30,000 lbs or more. Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or over.
Aluminum resinate, precip., 2.1% Al, dms lb. .40¼ - —
Aluminum stearate, dibasic, ctns., c.l lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Monobasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Tribasic, ctns. c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Aluminum sulfate, coml., grd., bgs. c.l., works, frt. equald ton. 41.00 - —
bulk, c.l., same basis ..... ton. 40.00 - —
lump, bgs., c.l., same basis ton 44.00 - —
iron-free, bgs., c.l., works, frt equald 100 lbs. 3.80 - —
bgs. l.c.l. works, frt. equald. 100 lbs. 4.30 - 8.30
USP, gran., dms., works lb .30 - —
USP, powd., dms., works lb. .27 - —
Aluminum sulfate prices $1 per ton higher in the South
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots ..... oz. 6.50 -10.00
p-Aminoacetanilide, tech., paste, dms., frt alld lb. 1.57 - —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.50 - 1.75
Aminoazotoluene base, bbls., 100% basis lb. 1.03 - 1.18
p-Aminobenzoic acid, tech., dry, dms., works lb. 1.72 - —
2-Amino-4-chlorophenol, tech., solid, dms., frt. alld lb. 8.10 - —
p-Aminodiphenylamine, tech., solid, dms. frt. alld lb. 3.00 - —
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 - —
dms., l.c.l., dlvd ..... lb. .49 - —
tanks, dlvd. ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
dms., l.c.l., frt. alld. ..... lb. .45 - —
tanks, frt. alld. ..... lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms., smaller lots. ..... lb. 2.50 - —
p-Aminophenol, dms., frt. alld. lb. 1.15 - —
Aminophylline, USP, 100-lb. dm., frt. alld lb. 3.25 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.40 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald. E. of Rockies ton. 88.00 - —
refrigeration, tanks, works, frt. equald. E. of Rockies ton. 90.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E. of Rockies, ton. 91.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal gray, bgs., cl., works, frt, equald 100 lbs. 8.25 - —
bgs., l.c.l., same basis 100 lbs. 8.65 -12.65
Ammoniac, sal., white (see Ammonium chloride, tech.).
Ammonium acetate, purif., dms lb. .40 - —
Ammonium benzoate, USP, fib. dms. ton lots, works lb. 1.00 - —
fib dms. 1,000-lb lots, works. lb. 1.05 - —
Ammonium biborate, gran., dms., c.l., works ton. 325.00 - —
dms., ton lots ex whse. 100 lbs. 20.40 - —
dms., smaller lots, ex whse. 100 lbs. 21.15 - —
Ammonium bicarbonate, dom., dms., c.l., works 100 lbs. 7.00 - —
dms., l.c.l., works ..... 100 lbs. 9.00 - —
Ammonium bichromate, dms. works lb 42 43
Ammonium bifluoride, dms. dlvd lb .2145 .2245

Ammonium bromide, NF, gran., dms., c.l., t.l., frt. equald lb. .44 - —
dms. l.c.l., same basis lb. .46 - —
Ammonium carbonate, USP, lump, dms., c.l lb. .15½- —
Ammonium chloride, white tech., fine gran., bgs. c.l. works 100 lbs 5.75 - —
bgs l.c.l., works 100 lbs 7.75 - 8.20
USP gran fib dms lb .17½ - —
Ammonium citrate dibasic, 250-lb. dm f.o.b works E lb .77 - —
Ammonium dichromate (see Ammonium bichromate)
Ammonium fluoride (see Ammonium bifluoride)
Ammonium gluconate tech., 200-lb. dm f.o.b works E lb .45 - —
Ammonium hydroxide (see Ammonia aqueous)
Ammonium iodide NF 25-lb. jar, f.o.b works lb 4.26 - —
Ammonium lauryl sulfate, dms., c.l., frt alld lb. .20½- —
dms., t.t.l. frt alld lb. .21½- —
tanks frt alld lb. .19½- —
Ammonium lignin sulfonate bgs., c.l., works 100 lbs 3.25 - —
bgs. l.c.l., works 100 lbs 3.40 - 3.65
Ammonium linoleate, 80%, dms., works lb. .50 - .55
Ammonium molybdate, CP, cryst., fib dms. 15,000 lbs. works lb 1.22 - —
fib dms. 2,000 lb contracts, works lb 1.23 - —
single fib dms. works lb. 1.24 - —

Ammonium nitrate, dom. fertilizer grade, 33.5% N, bags, f.o.b. works ton.68.00 - —
with dolomite, 20.5% N, bgs., c.l., Hopewell, Va ton.48.00 - —
Imp., Canadian 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $3 ton base price ton.68.00 - —
Ammonium oxalate, tech., fine gran., 250-lb dm. f.o.b. works E lb. .28½- —
Tech., powd., 200-lb. dm., same basis lb. .28½- —
Ammonium pentaborate, gran., bgs., c.l., works ton.193.00 - —
bgs., ton lots, ex whse 100 lbs.14.23 - —
bgs., smaller lots, ex whse 100 lbs.15.48 -17.48
Ammonium pentaborate powder $10 per ton higher in bags.
Ammonium persulfate, tech., dms., 10-ton lots or more, works. lb. .18 - —
dms., smaller lots, works lb. .20 - .23
Ammonium phosphate, coml., bgs., c.l., works, frt. equald lb. .09¼- —
bgs., l.c.l., same basis lb. .10 - —
Dibasic, NF, V, bbls., dms lb. .46 - —
Dibasic, tech., bgs., c.l., works, frt. alld lb. .09¼- —
Ammonium silicofluoride, dms., works lb. .11¾- .13¼
Ammonium sulfamate bgs., c.l., t.l., works lb. .19 - —
bgs., l.c.l., works lb. .20¼- .27

Ammonium sulfate, standard granular, bulk, f.o.b. works, base price ton.32.00 - —
purif., bgs., f.o.b. works lb .08½- .18
Large granular, bulk, c.l., works. ton.35.00 - —
bgs., c.l., works ton.40.00 - —
Tech., bulk c.l., t.l., works ton.52.00 - —
bgs., c.l., t.l., works ton.56.00 - —
bgs., l.c.l. t.l., works—100 lbs 3.20 - 3.30
Ammonium sulfide, liq., 40-44%, tanks, frt., equald.,100% basis ton.160.00 - —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate).
Ammonium thiocyanate, tech., cryst., dms., c.l., works lb. .20 - —
dms., l.c.l., works lb. .22 - .26
Tech., soln., 50%, tanks, frt. equald., basis ammonium thiocyanate content lb. .17¼- —
Ammonium thioglycolate, coml., 55-gal. dms., ton lots, 100% basis lb. 1.15 - —
d-Amphetamine hydrochloride, monobasic, dms. lb.17.50 -23.50
dl-Amphetamine hydrochloride, dibasic, dms. lb. 4.50 - 6.00
d-Amphetamine phosphate, fib. dms., 100-lb lots lb.15.00 - —
dl-Amphetamine phosphate, dms.lb. 4.20 - 5.60
d-Amphetamine sulfate, fib. dms. lb.15.00 -17.00
dl-Amphetamine sulfate, fib. dms., lb. 4.20 - 5.60
Amyl acetate, ex fusel oil, tech., dist., from 125° to 150°C., dms., c.l., frt. alld. E. of Rockies lb. .18½- .19
dms., l.c.l., same basis lb. .20 - .20½
tanks, same basis lb. .16 - .16½

Amyl acetate, ex pentane, reg., dms., c.l., dlvd lb. .19 - —
dms., l.c.l., dlvd lb. .21½- —
tanks, dlvd. lb. .16½- —
tech., dms., c.l., dlvd lb. .17 - —
dms., l.c.l., dlvd lb. .18½- —
tanks, dlvd. lb. .14½- —
Syn., oxo process, dms., c.l., dlvd. lb. .19 - —
dms., l.c.l., dlvd lb. .20½- —
tanks, dlvd. lb. .16½- —
Amyl alcohol, ex fusel oil (see Fusel oil refd.).
Amyl alcohol, ferment, refd., 128°-132°C., dms., l.c.l., dlvd lb. .43½- —
refd., ACS grade, dms., l.c.l., dlvd lb. .45½- —
ex pentane, mixed amyls, dms., c.l., frt. alld lb. .19 - —
dms., l.c.l. frt. alld lb. .20½- —
tanks, frt. alld lb. .16½- —
primary, dms., c.l., frt. alld. lb. .19¾ .20¼
dms., l.c.l., frt. alld lb. .21¼- .21¾
tanks, frt. alld lb. .17¼- .17¾
Sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
dms., l.c.l., works lb. .20½- —
tanks, works lb. .17 - —
Tert-synthetic, dms., c.l., frt. alld, E lb. .17 - —
dms., l.c.l., frt. alld. E lb. .18½- —
tanks, frt. alld E lb. .14½- —
Amyl alcohol, 1-pentanol (syn. normal), dms., c.l., works lb. 41½- —
dms., l.c.l., works lb. .43 - —
tanks works lb. 39½- —
2-pentanol, dms., c.l., works lb. .65 - —
dms., l.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Amyl n-butyrate, dms. lb. 1.00 1.25
Amyl cinnamic aldehyde, dms lb. 1.70 - 2.20
p-tert Amyl phenol dms. c.l. works. lb. .26¾ —
dms., l.c.l., works lb. .27¾ —
Amyl salicylate, cns., dms lb. .73 1.08
Amyris oil, dms. lb. 1.65 - 2.05
Anethole, tech., dms. lb. .92 - 1.00
USP, cns., dms. lb. 1.12 - —
Angelica root, bls. lb .90 1.00
Angelica root oil, bots lb 120.00 140.00
Angelica seed oil, bots. lb 120.00 130.00
Aniline, dms., c.l., frt. alld lb .20 - —
dms., l.c.l. frt. alld lb .21 - —
tanks, frt alld lb. .18 - —
Aniline oil (see Aniline)
Aniline salt, dms., c.l., truckloads, 20,000 lbs. min., frt. alld. lb. .33 - —
dms., l.c.l., same basis lb. .35 - —
Anise oil, USP dms. lb. 1.75 3.00
Anise seed, Mexican, bgs lb. .16 - —
Spanish, bgs. lb. .16½- —
Anisic aldehyde, dms lb. 1.50 - 2.20
o-Anisidine, dms., c.l., frt. alld lb. .80 - —
dms., l.c.l., same basis lb. .82 - —
tanks, same basis lb. .78 - —
p-Anisidine, dms., works lb. .97 - —
Anthracene 90-95%, dms., c.l., t.l., f.o.b., works lb. .42½- —
dms., l.c.l., minimum shipment 1,000 lbs., same basis lb. .45 - —
Anthranilic acid, 99%, 150-lb. dms., dlvd lb. 1.15 - —
Anthraquinone, 99.5% bbls., c.l., frt. alld lb. .83 - —
bbls., l.c.l., same basis lb. .86 - —
Electrical grade, bbls., l.c.l., same basis lb. 1.10 - —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines. lb. .29 - —
cs., c.l., mines lb. .29½- —
Antimony oxide, bgs., c.l., frt. alld. lb. .24½- —
bgs., l.c.l., frt. alld. lb. .26 - —
Prices of antimony oxide are 2¢ higher west of the Rockies.
Antimony sulfide, approx. 65%, bgs., 10,000-lb. lots, dlvd lb. 23 - —
bgs., smaller lots, dlvd lb. .24 - .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
pails, l.c.l., works lb. .43 - —
Antimony-potassium tartrate, tech., powd., 250-lb. dm., f.o.b. works, E lb. .69½- —
USP, powd., 250-lb. dm., same basis. lb. .74½- —
Apomorphine hydrochloride, USP, bots., 25-oz. lots oz.35.60 - —
Apricot kernel oil, USP, dms lb. .70 - 1.25
Arabic gum, amber sorts, 10 bgs. lb. .24 - —
USP, powd., bbls. lb. .29 - .30
Areca nuts, powd., bbls. lb. .13 - —
Arecoline hydrobromide, NF, bots., tins, 100 oz. or more oz. 4.00 - —
l-Arginine, free base, dms., 10-kilo lots or more kilo.90.00 - —
l-Arginine glutamate, dms., 10-kilo lots or more kilo.60.00 - —
l-Arginine monohydrochloride, dms., 10-kilo lots or more kilo.60.00 - —
Arnica flowers (true Montana), bls. lb. .75 - —
Aromatic petroleum solvents—See Solvent Naphtha, petroleum, aromatic
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls. c.l., works lb. .031 - —
Arsenic trioxide, NF, powd., dms., 300-lbs., f.o.b. works lb. .48 - —
Arsenic, white, powd., bbls., c.l., works lb. .04½- —
bbls., l.c.l., works lb. .06½- .07¼
Arsenous acid, tech. (see Arsenic, white).
Arsenous acid USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb. 3.70 - —
Light shades, bbls. lb 2.85 - —
Asafetida gum, cns lb. .36 - .40
Powd., bbls., dms lb 75 - .80
Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian crude
6D, c.l. (30 tons) mines ton 86.00 - —
7D, c.l. (30 tons) mines ton 75.00 - —
7F, c.l. (30 tons) mines ton 71.00 - —
7H, c.l. (30 tons) mines ton 61.00 - —
7K, c.l. (30 tons) mines ton 50.00 - —
7M, c.l. (30 tons) mines ton 44.00 - —
7R, c.l. (30 tons) mines ton 43.00 - —
7RF, c.l. (30 tons) mines ton 44.00 - —
7T, c.l. (30 tons) mines ton 41.00 - —
7TF c.l. (30 tons) mines ton 44.00 - —
Asbestos prices are in Canadian funds; l.c.l. lots $4 per ton higher.
Ascorbic acid, USP 25, 50-kilo dms., kilo.10.00 - —
10 kilo dms. kilo.10.35 - —
5-kilo dms. kilo.10.75 - —
1-kilo bottle kilo.11.00 - —
500-gram bottle kilo.11.50 - —
Ash black (see Barium sulfide).
Asphalt, gilsonite, black jet, bgs., c.l., mines ton 40.00 - —
ex-whse, N. Y., N. J ton 86.50 - —
seconds, 300°-390°F. fusing pt. bgs., c.l., mines ton 35.00 - —
select, 350°F. fusing pt., bgs. c.l., mines ton 41.00 - —
270°-295°F. fusing pt., bgs., c.l., mines ton 40.00 - —
Manjak No. 10 crude, dms., works lb .07 - —

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BUTYL ALCOHOL
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| | | | |
|---|---|---|---|
| Asphalt, petroleum, cut-back, tanks, tankwagon, refy. | gal. | .09½ | — |
| emulsion tanks tankwagon, refy. | gal. | .09½ | — |
| steam-refd., 50-80 penetration, tanks, tankwagon, refy. | ton | 21.00 | — |
| 85-300 penetration tanks, tankwagon, refy | ton | 20.00 | — |
| Aspirin (see Acetylsalicylic Acid). | | | |
| Atropine, NF, tins | oz. | 5.73 | 7.50 |
| Atropine sulfate, USP, bots. | oz. | 5.23 | 5.73 |
| Azelaic acid, bgs., c.l., dlvd. | lb. | .40 | — |
| bgs., ton lots, same basis | lb. | .41 | — |

## B

| | | | |
|---|---|---|---|
| Bacitracin, b u k, 1,000,000,000 or more units | | .65 | — |
| less than 1,000,000,000 units, 50,000 units. | | .70 | — |
| Balm of Gilead buds dried bgs | lb | 1.25 | 1.35 |
| Barberry root bark, bgs | lb. | 1.00 | 1.10 |
| Barbital, NF, 100-lb. dms., f.o.b. works | lb. | 4.50 | — |
| Barbital sodium, NF, 100-lb. dms., | | | |
| Barium carbonate, precip., bgs., c.l., works | ton | 111.50 | — |
| bgs. smaller lots, works | ton | 126.50 | — |
| Barium chlorate, dms., works | lb | .32 | .41 |
| Barium chloride, anhyd., bgs., c.l., works | ton | 176.00 | — |
| bgs. t.c.l. works | ton | 196 00 | — |
| NF, cryst., dms., 400-lbs., works. | lb. | .23 | — |
| Tech., cryst., bgs., c.l., works, 100 lbs. | | 7.00 | — |
| bgs., t.c.l., works | 100 lbs. | 8.00 | — |
| Barium chromate bgs frt. equald | lb | .38 | — |
| Barium dioxide (see Barium peroxide) | | | |
| Barium hydrate, cryst., bgs., c.l., t.l., frt. equald | ton | 208 00 | — |
| bgs. t.c.l. t.l., frt equald | ton | 218 00 | — |
| Barium monohydrate, 99% bgs., c.l frt equald | 100 lbs. | 11 25 | — |
| bgs., t.c.l., frt. equald | 100 lbs. | 11 75 | — |
| Barium monoxide (see Barium oxide). | | | |
| Barium nitrate, bbls, c.l., t.l., dlvd. | lb. | .16 | — |
| bbls. t.c.l., t.l., dlvd. | lb. | .17 | — |
| Barium oxide grd., dms. c.l. t.l., frt. equald | ton | 275.00 | — |
| dms., t.c.l., t.l., frt. equald. | ton | 285 00 | — |
| Barium peroxide dms. frt. equald. | lb. | .20 | — |
| Barium stearate ctns. c.l. frt alld. | lb. | .41 | — |
| ctns., t.c.l., same basis | lb. | .42 | .46 |
| Barium sulfate, tech. (see Barytes and blanc fixe). | | | |
| Barium sulfate, X-ray, 100-lb. dm. | lb. | .19½ | — |
| Barium sulfide dms., c.l., works. | ton | 100.00 | — |
| dms., t.c.l., works | ton | 110.00 | — |
| Barytes, southern off-color, bgs., mines | ton | 25.00 | — |
| 95-75%, bgs., mines | ton | 25.00 | — |
| white, water-grd., paper bgs., c.l., St. Louis | ton | 55.00 | 55.25 |
| paper bgs. ex whse., New York | ton | 79.85 | — |
| Battery acid, cbys. c.l. works, E. | 100 lbs. | 2.35 | — |
| cbys., t.c.l., works, E | 100 lbs. | 2.65 | 10.95 |
| Bauxite, bulk, mines | ton | 7.00 | 10.00 |
| Bay oil, Nr Puerto Rican, 50-55% cns. | lb. | 1.95 | 2.70 |
| 55-60%, cns | lb | 2.50 | 3.05 |
| NF, West Indian, 50-55%, cns., dms | lb. | 2.35 | — |
| Bayberry wax, bgs | lb. | .45 | .50 |
| Beeswax, crude, African, bgs | lb. | .51 | .53 |
| Brazilian, bgs. | lb. | .56 | .57 |
| Central American, bgs | lb. | Nom. | |
| Chilean, bgs. | lb. | .58 | Nom. |
| Refd. USP bleached white, bricks, 100-lb. ctns | lb. | .69 | .71 |
| white, slabs, 100-lb. ctns | lb. | .63 | .70 |
| yellow, bricks, 100-lb. ctns | lb. | .59 | .61 |
| yellow, slabs, 100-lb. ctns | lb. | .58 | .60 |
| Belladonna leaf, bls. | lb. | .26 | — |
| Belladonna root, bls. | lb. | .23 | — |
| Bentonite, dom 200 mesh, bgs., c.l., mines | ton | 14.00 | — |
| Imp. Italian, white, high gel., bgs., 5-ton lots, ex whse | ton | 95.20 | — |
| bgs., 1-ton lots, ex whse | ton | 99.00 | — |
| Imp., Italian, white, low gel., bgs., 5-ton lots, ex whse | ton | 93.40 | — |
| bgs., 1-ton lots, ex whse | ton | 97.16 | — |
| Benzal chloride, cbys., works | lb. | .44 | — |
| Benzaldehyde, NF, dms | lb. | .80 | 1.05 |
| Tech., dms., c.l., t.l. | lb. | .47 | — |
| dms., l.c.l. | lb. | .48 | — |
| Benzene, coaltar, pure or nitration, tanks, works: | | | |
| Bethlehem, Pa. | gal. | .34 | — |
| Birmingham district | gal. | .34 | — |
| Chicago district | gal. | .34 | — |
| Cleveland district | gal. | .34 | — |
| Geneva, Utah | gal. | .34 | — |
| Johnstown, Pa. | gal. | .34 | — |
| Lackawanna, N. Y. | gal. | .34 | — |
| Lone Star, Tex. | gal. | .34 | — |
| Lorain, Ohio | gal. | .34 | — |
| Middletown, Ohio | gal. | .34 | — |
| Mennequa, Colo. | gal. | .34 | — |
| Philadelphia district | gal. | .34 | — |
| Pittsburgh district | gal. | .34 | — |
| Sparrows Point, Md. | gal. | .34 | — |
| Syracuse, N. Y. | gal. | .34 | — |
| Terre Haute, Ind | gal. | .34 | — |
| Youngstown, Ohio | gal. | .34 | — |
| Benzene, petroleum, nitration or industrial, Houston, Tex., tanks, | gal. | .34 | .40 |
| Benzene hexachloride, 25% and 99% gamma isomer (see Lindane). | | | |
| Benzene hexachloride, tech., high gamma, bgs., c.l., t.l., consignment, dlvd., gamma-unit, | | .0075 | — |
| bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit, | | .0065 | — |
| Tech., low gamma, bgs., c.l., t.l., consignment, dlvd gamma-unit, | | .0075 | — |
| bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. | | .0056 | — |
| Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis | lb. | 1.19 | — |
| bbls., l.c.l., same basis | lb. | 1.21 | — |
| Benzidine sulfate, tech., bbls., frt. alld., 100% basis | lb. | 1.21 | — |
| Benzidine yellow, AAA, bbls. dlvd. | lb. | 2.20 | — |
| AAOT, bbls., dlvd. | lb. | 2.55 | — |
| Lightfast, bbls., dlvd. | lb. | 3.40 | — |
| Benzocaine, dms., 100-lbs., frt. alld. | lb. | 3.25 | — |
| Benzoic acid, tech., bbls., dms., c.l., t.l., frt., alld | lb. | .37 | — |
| bbls., dms., ton lots, same basis | lb. | .41 | — |
| bbls., dms., 1,000-lb. lots, same basis | lb. | .43 | — |
| USP, bbls., dms., ton lots | lb. | .48 | — |
| bbls., dms., 1,000-lb. lots | lb. | .50 | — |

**BENZOL**
Benzol quotations, both coaltar and petroleum, may be found under Benzene.

| | | | |
|---|---|---|---|
| Benzoin gum Sumatra, cs. | lb. | .33 | — |
| Benzophenone, dms. | lb. | 1.40 | 1.65 |
| Benzotriazole, tech., dms., 1,000-lb. lots, works | lb. | 2.25 | — |
| Benzotrichloride, cbys., 1,000-lb. lots or more, frt., equald | lb. | .21 | — |
| cbys, smaller lots, frt., equald | lb. | .23 | — |
| Benzoyl chloride, coys., dms., c.l., works, frt., equald | lb. | .22 | — |
| cbys., t.c.l., same basis | lb. | .23 | — |
| tanktrucks, dlvd. Metropolitan area | lb. | .21 | — |
| Benzoyl peroxide, purif., fib. dms., 50 to 1,000-lb. lots, works | lb. | .98 | 1.08 |
| Benzyl acetate, f.f.c., cns., dms | lb. | .58 | .79 |
| Benzyl alcohol, NF, dms. | lb. | .58 | .80 |
| Tech., dms., dlvd. | lb. | 47½ | .65 |
| Benzyl benzoate, NF, USP, 40-lb. dms | lb. | .68 | — |
| Benzyl chloride, tech., cbys., dms., c.l., works, frt., equald | lb. | .22½ | .25½ |
| cbys., dms., l.c.l., same basis | lb. | 23½ | 25½ |
| tanktrucks, dlvd., Metropolitan area | lb. | .21 | — |

A 2½c. differential is quoted on benzyl chloride in 5-gal cbys. In steel dms. prices are ½c. lower

| | | | |
|---|---|---|---|
| Benzyl cinnamate, cns. | lb. | 3.30 | 3.60 |
| Benzyl dimethylamine, dms., works. | lb. | 2.25 | — |
| Benzyl formate cns. | lb | 1.85 | 2.10 |
| Benzyl isoeugenol, cns | lb. | 9.25 | — |
| Benzyl propionate bots. | lb. | 1.35 | 1.65 |
| Benzyl salicylate, bots. | lb. | 1.50 | 1.85 |
| Benzylidine acetone, bots. | lb. | 1.75 | 1.80 |
| Benzylidine chloride (see Benzal chloride). | | | |
| Berberine bisulfate, cns | lb. | 56.50 | — |
| Berberine hydrochloride, bots | lb. | 56.50 | — |
| Bergamot oil, nat., NF Italian cns. | lb. | 11.00 | 12.00 |
| Betagammapicoline (see b,g-Picoline). | | | |
| Betahydroxynaphthoic acid (see b-Oxynaphthoic acid). | | | |
| Betaoxynaphthoic acid (see b-Oxynaphthoic acid) | | | |
| Betamethylnaphthalene (see b-Methylnaphthalene) | | | |
| Betanaphthol (see b-Naphthol) | | | |
| Betanaphthylamine (see b-Naphthylamine) | | | |
| Betaphenylethylamine (see b-Phenylethylamine). | | | |
| BHC (see Benzene hexachloride, tech.). | | | |
| Biotin, cryst., bots. | gram | 10.00 | — |
| Biphenyl (see Diphenyl). | | | |
| Birchtar oil, crude cns. | lb. | 1.50 | 1.90 |
| Rectified, cns. | lb. | 1.75 | 2.00 |
| Bismuth chloride, tars | lb. | 5.11 | — |
| Bismuth hydroxide, dms. | lb | 4.60 | 4.65 |
| Bismuth metal, bxs. ton lots | lb. | 2.25 | — |
| Bismuth nitrate cryst. dms. | lb | 2.08 | 2.17 |
| Bismuth oxide, anhyd., 100-lb. dm., f.o.b. works | lb. | 4.42 | — |
| Bismuth oxychloride 25-lb dm., f.o.b. works | lb | 4.42 | — |
| Bismuth subcarbonate USP dms. | lb | 3.20 | — |
| Bismuth subgallate, NF, 200-lb. dm., f.o.b. works | lb. | 3.15 | — |
| Bismuth subiodide, fib. dms. | lb. | 5.37 | — |
| Bismuth subnitrate NF, 200-lb. dm., f.o.b. works | lb. | 2.63 | — |
| Bismuth subsalicylate, USP, 100-lb. dm., f.o.b. works | lb. | 3.50 | — |
| Bismuth-ammonium citrate, USP, powd., jars | lb | 4.22 | — |
| Bisphenol-A, bgs., c.l., t.l., single shipt., 70,000-lbs or more, frt alld | lb. | .29½ | — |
| bgs., c.l., t.l., less than 70,000 lbs., same basis | lb. | .30 | — |
| bgs. t.c.l. same basis | lb | .31 | — |
| Blackberry root bark bls | lb | .50 | .55 |

**BLACK PIGMENTS**
Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

| | | | |
|---|---|---|---|
| Blanc fixe, direct process, bgs | c.l., works | ton | 145 00 — |
| bgs., t.c.l., works | | ton | 155 00 — |
| bgs. t.c.l. New York whse | | ton | 195 00 — |
| Blood, dried, 16-16½% ammonia, bgs., New York | | unit-ton. | 4.75 - 5.25 |
| high-grade, unground, 15-17% ammonia, bgs. Chicago | | unit-ton. | 4.75 - 5.25 |
| Bloodroot, bls. | | lb. | .90 1.00 |

**BLUE PIGMENTS**
Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes)
Blue vitriol (see Copper sulfate)

If you're looking for:
antistatic agents
sanitizers
textile softeners
start with
LAURYL BROMIDE
H H H H H H H H H H H H
H — C — C — C — C — C — C — C — C — C — C — C — C — Br
H H H H H H H H H H H H

***A practicable intermediate for the synthesis of quaternary ammonium salts with germicidal, cationic, and surfactive properties***

**INVESTIGATE THESE ADVANTAGES:** Michigan Chemical's lauryl bromide contains less than 1% alcohol; is exceptionally light in color (Gardner index: 2 or under) with high clarity. This means negligible color or alcohol carry-over to the end product. Even with these unusual properties this material is offered at standard rather than premium prices. Combine these factors and you have a very interesting intermediate to work with in preparing quaternary ammonium compounds.

Specifically, our lauryl bromide is a mixture of straight chain primary bromides having 10 to 18 carbon atoms with the 12 carbon, or lauryl chain, predominating (approximately 60%). Lauryl bromide will undergo all the reactions possible with normal alkyl halides. In the formation of quaternary ammonium salts and other replacement and exchange reactions, however, the reactivity of the lauryl bromide will be greater than its chlorine analog. This will permit lower reaction temperatures — important when working with materials subject to heat discoloration or decomposition.

Michigan Chemical now offers lauryl bromide, Technical Grade, in large commercial quantities. Write us for samples, technical data, and prices and indicate your area of interest. We will also welcome your inquiry on the custom synthesis of other organic bromides.

**Description:** Clear, colorless to pale straw-colored mobile liquid with a coconut odor and low volatility.

**Grade:** Technical. Contains approximately 60% by weight of lauryl bromide with lesser amounts of decyl, myristyl, cetyl, and stearyl bromides. The starting alcohol for this product is derived from a typical coconut oil composition.

**Typical Properties:**

| | |
|---|---|
| Molecular weight, calculated | 261 |
| Specific gravity, 25/25°C | 1.026 |
| Bromine content, % | 30.6 |
| Boiling range, 5% to 95%, at 20mm Hg. | 151-208°C. |
| Freezing point | —15.5°C. |

*For complete listing of Michigan Chemical products, see your copy of Chemical Materials Catalog or Chemical Week Buyers Guide.*

**MICHIGAN CHEMICAL CORPORATION**
675 North Bankson Street, Saint Louis, Michigan
EASTERN SALES OFFICE: 230 Park Avenue, New York 17, N.Y.

## Bois de Rose Oil—Calciferol

Bois de rose oil, Brazilian, dms. lb. 2.20 - 2.85
Peruvian, dms. lb. 1.95 - 2.40
BON acid maroons, pure, bbls lb 1.75 —
Resinated bbls lb 1.50 —
Bone black, dms., l.c.l., frt. alld. lb. .19½- .26¼
Pacific coast bone black prices 2c. per lb higher
Bonemeal steamed, works, E ton 75.00 - —
Bone phosphate, defluorinated of lime (see Defluorinated phosphate).
Bone phosphate, precip. (see Calcium phosphate, tribasic).
Borax, tech., anhyd, 99½%, bgs., c.l., works ton 92.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 7.42 - —
bgs., smaller lots, same basis 100 lbs. 8.67 - 10.67
bulk, c.l., works ton 83.00 - —
gran., decahydrate, 99½%, bgs., c.l., works ton 50.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 5.32 - —
bgs., smaller lots same basis, 100 lbs. 6.57 - 8.57
bulk, c.l., works ton 43.50 - —
gran., pentahydrate, 99½%, bgs., c.l., works ton 64.50 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 6.05 - —
bgs., smaller lots, same basis 100 lbs. 7.30 - 9.30
bulk, c.l., works ton 58.00 - —
USP, powd., bgs., c.l., works, ton 54.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 6.45 - —
bgs., smaller lots, same basis, 100 lbs. 7.70 - 9.70
Bordeaux powder tribasic bgs., c.l., dlvd lb. .24 - —
bgs., l.c.l., same basis lb. .26 - —
Boric acid, tech. anhyd. 99.9% bgs., c.l., works ton 335.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 19.62 - —
bgs., smaller lots, same basis, 100 lbs. 20.87 - 22.87
cryst., 99.9%, bgs., c.l., works, ton 163.50 - —
bgs., ton lots ex whse, New York or Chicago 100 lbs. 11.05 - —
bgs., smaller lots, same basis, 100 lbs. 12.30 - 14.30
dms., c.l., works ton 188.50 - —
dms., ton lots, ex whse., New York or Chicago, 100 lbs. 12.30 - —
bgs., smaller lots, same basis 100 lbs. 13.05 - —
gran., 99.9% bgs. c.l., works, ton 112.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 8.47 - —
bgs., smaller lots same basis, ton 174.25 - —
dms., c.l., works ton 137.00 - —
dms., ton lots, ex whse, New York or Chicago 100lbs. 9.72 - —
dms. smaller lots same basis, 100 lbs. 10.47 - —
bulk c.l., works ton 106.00 - —
powd., bgs., ton lots ex whse, New York or Chicago, 100 lbs. 8.85 - —
bgs., smaller lots, same basis, 100 lbs. 10.10 - 12.10
dms., smaller lots, same basis 100 lbs. 11.45 - —
USP boric acid $25 per ton higher in bags.
Borneol, cns. lb. 2.75 - —
Boron trichloride, CP, 1,800-lb. cyls., works lb 1.25 - —
100-lb cyls. works lb. 1.70 - —
Boron trifluoride, gas, cyls, t.l., works lb. .70 - —
cyls., t.t.l., works lb. .70 - —
Brimstone (see Sulfur).
Broenner's acid, bbls. lb. 1.53 - —
Bromine purif. cs., c.l., t.l., dlvd. E of Rockies lb. .32 - —
cs., l.c.l., same basis lb. .34 - .39
ref. dms., c.l., t.l., dlvd. E. of Rockies lb. .31 - —
ref. dms., l.c.l., same basis lb. .31 - .34
tanks, same basis lb. .21½- —
Bromochloromethane dms., c.l., frt. equald lb. .48 - —
dms., l.c.l. same basis lb. .50 - —
tanks, same basis lb. .47 - —
Bromoform, pharmaceutical grade, 100-lb. chys lb 1.80 - 1.90
Bromstyrol, bots. lb. 5.35 - 5.70
Brucine, cns. oz. 1.75 Nom.
Brucine sulfate, NF, cns. oz. 1.75 - 1.90
Buchu leaves, bls lb. .80 - .85

### BROWN PIGMENTS

**Brown pigment quotations are listed individually. For example, prices on Brown, iron oxide, may be found in the l's under Iron oxide brown.**

Butadiene, retd cyls., c.l., refy lb. .21 - —
cyls., l.c.l. refy lb. .22 - —
tanks, dlvd. lb. .14½- —
Butene-1, tanks, works lb. .0625- —
Butene-2, tanks, works lb. .0570- —
n-Butyl acetate, ferment, dms., c.l., frt. alld lb. .17 - —
dms., l.c.l., same basis lb. .18½- —
tanks, same basis lb. .14½- —
Syn., dms., c.l., dlvd. E lb. .17 - —
dms., l.c.l., same basis lb. .18½- —
tanks, same basis lb. .14½- —
sec-Butyl acetate, syn., dms., c.l., dlvd.E lb. .14¾- —
dms., l.c.l., same basis lb. .16¼- —
tanks, same basis lb. .12¼- —
n-Butyl acrylate, dms., c.l. or t.l., straight or mixed frt. alld. E. lb. .42½- —
dms., l.t.l., same basis lb. .43½- —
tanks, same basis lb. .40 - —
Prices of n-butyl acrylate are 1c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
n-Butyl alcohol, ferment, dms., c.l., frt. alld lb. .18 - —
dms., l.c.l., frt. alld lb. .19½- —
tanks, frt. alld lb. .15½- —
n-Butyl alcohol, syn., dms., c.l., dlvd lb. .18 - —
dms., l.c.l., frt. alld lb. .19½- —
tanks, dlvd lb. .15½- —
Sec-synthetic, dms., c.l., dlvd lb. .15 - —
dms., l.c.l., dlvd lb. .16½- —
tanks, dlvd lb. .12½- —
Tert-synthetic, dms., c.l., frt. alld, dlvd. E. lb. .15 - —
dms, l.c.l. same basis lb. .16½- —
tanks, same basis lb. .12½- —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride dms. c.l., works lb. .37¼- —
dms., l.c.l., works lb. .38¼ —

n-Butyl ether dms., c.l., works lb. .35¼- —
dms., l.c.l., works lb. .36 - —
tanks, works lb. .33¼- —
Butyl lactate, dms., c.l., frt. alld. E. of Rockies lb. .42½- —
dms., l.c.l., same basis lb. .43½- —
tanks, same basis lb. .40 - —
Butyl laurate, dms., works lb. .37½- —
Butyl methacrylate, dms., c.l., t.l., works lb. .55 - —
dms., l.c.l., works lb. .55½- —
Butyl oleate, refd., dms., l.c.l., works lb. .32 - —
Butyl phenylacetate, dms., lb 4.50 4.60
Butyl phthalate (see Dibutyl phthalate).
Butyl stearate, dms., c.l., frt. alld. E. of Mississippi lb. .27¼- —
dms., l.c.l., same basis lb. .28¼- —
Butylamine (see Mono-, Di- and Tri-butylamine)
tert-Butylamine, dms., c.l., t.l., f.o.b. works lb. .47 - —
dms., l.c.l., same basis lb. .47½- —
tc., t.t., same basis lb. .45 - —
Butylated hydroxyanisole, food grade, dms., dlvd lb. 4.75 - —
6-tert-Butyl-m-cresol (see Mono-tert-butyl-m-cresol).
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).
1,3-Butylene glycol, dms., c.l., t.l., dlvd lb. .20½- —
dms., l.c.l., l.t.l., f.o.b. works lb. .22 - —
tanks, dlvd. lb. .18 - —

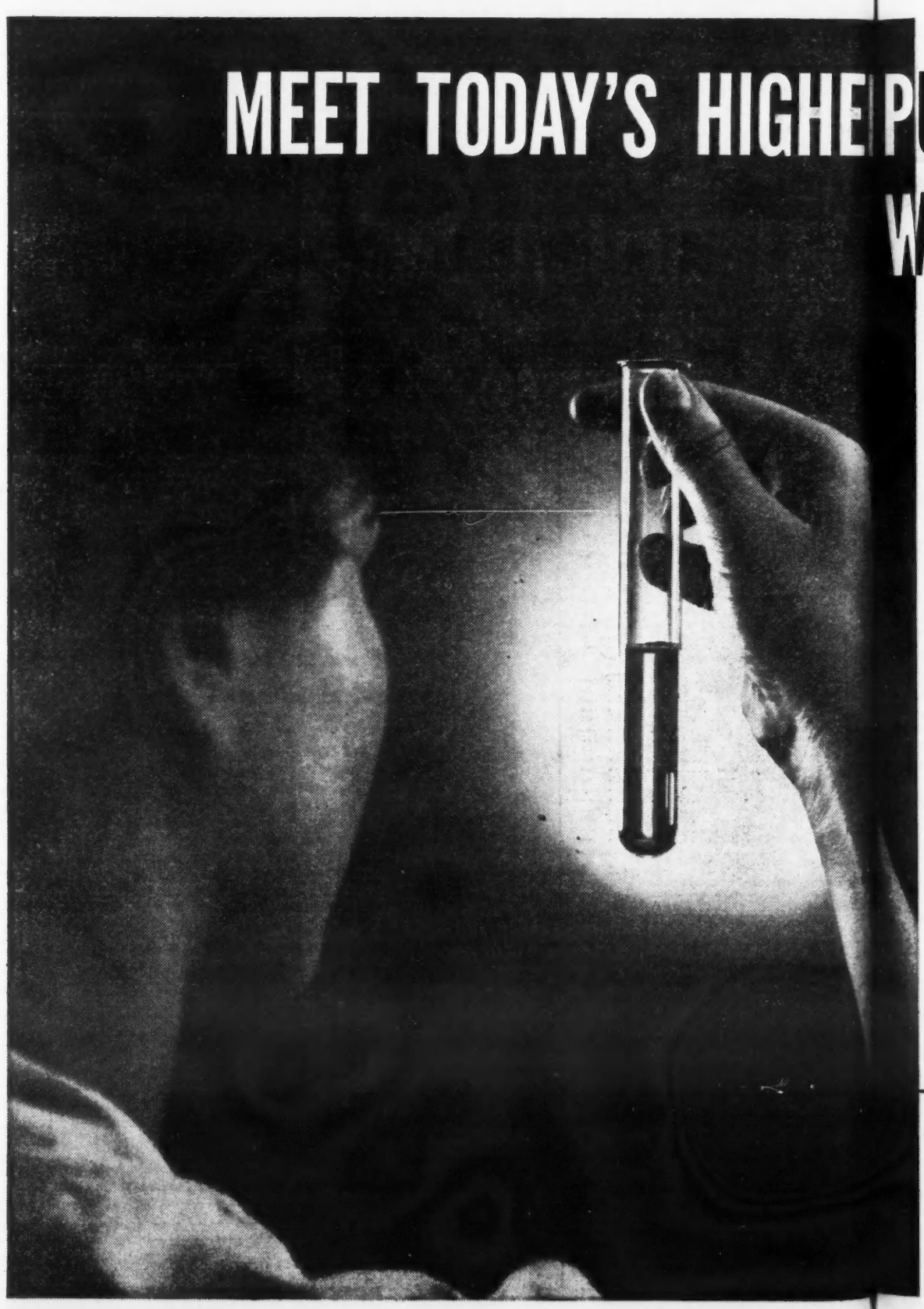
p-tert-Butylphenol, bgs., c.l., dlvd. lb. .27½- —
bgs., l.c.l., works lb. .28½- —
Butyraldehyde, dms., c.l., dlvd lb. .22 - —
dms., l.c.l., dvld. lb. .23½- —
tanks, dlvd. lb. .19½- —
Butyric acid, 99%, dms., c.l., frt. equald lb. .54 - —
dms., l.c.l., same basis lb. .34½- —
tanks, same basis lb. .32½- —
Butyric ether (see Ethyl butyrate).
Butyrolactone, dms., c.l., t.l., works. lb. .40 - —
dms., l.c.l., same basis lb. .43 - —

## C

Cacao butter (see Cocoa butter).
Cadmium CP red, dark shade, bbls., frt. alld, E. of Rockies lb. 5.55 - —
Light shade, bbls., same basis lb. 4.65 - —
medium shade, bbls., same basis. lb. 5.30 - —
Medium light shade bbls., same basis lb. 4.90 - —
Orange-red shade, bbls., same basis lb. 4.30 - —
Yellow all shades bbls. frt. alld. E. of Rockies lb. 2.85 - —
Cadmium iodide, 25-lb. fib dms. lb 6.75 - 7.00
Cadmium metal, ingots or sticks, ton lots, cs., dlvd lb. 1.30 - —
Cadmium-mercury lithopone orange, deep shade, bbls. frt alld E. of Rockies lb. 1.65 - —
Cadmium-mercury lithopone red, dark shade, bbls., same basis lb. 1.95 - —
Red, light shade, bbls. same basis. lb. 1.72 - —

Cadmium-mercury lithopone, red medium shade, bbls., same basis lb. 1.87 - —
Red, medium light shade, bbls., same basis lb. 1.80 - —
Red, maroon shade, bbls., same basis lb. 2.03 - —
Cadmium-selenide lithopone maroon, bbls., frt. alld. E. of Rockies. lb. 2.76 - —
Orange, bbls., same basis lb. 1.58 - —
Cadmium-selenide lithopone red, orange-red shade, bbls., same basis lb. 1.72 - —
Red, dark shade, bbls., same basis lb. 2.56 - —
Red, light shade bbls., same basis lb. 1.88 - —
Red, medium-light shade bbls., same basis lb. 2.00 - —
Red, medium shade bbls., same basis lb. 2.23 - —
Cadmium-selenide, lithopone yellow, all shades, bbls., frt. alld. E. of Rockies lb. 1.19 - —
Caffeine, NF, citrated, cms., 100-lb. lots or more lb. 2.70 - —
USP, nat., cryst., anhyd., dms., 100-lb lots or more lb. 2.10 - —
cryst., hydrous, dms., 100-lb. lots or more lb. 1.96 - —
USP, syn., anhyd., dms., 100-lb. lots or more lb. 2.10 - —
cryst., hydrous, dms., 100-lb. lots or more lb. 1.96 - —
Cajuput oil, native cns lb 1.75 2.55
Redist., USP, cns lb 1.50 2.10
Calamine, USP, dms. lb. .34 —
Calamus oil, bots lb. 12.00 - 20.00
Calciferol, cryst., 10-kilo or more lots, works gram. .54 - —
1-10 kilo lots gram. .55 - —
Calciferol, in edible oil (see Viosterol).


MEET TODAY'S HIGHE PUR
WIT

Calcium p-aminosalicylate trihydrate fib dms., 100 lbs. or more, frt. adjusted lb. 3.10 - —
Calcium arsenate, dealers, bgs., c.l., frt. alld lb. .09 - .09¼
bgs., l.c.l., same basis lb. .10 - .10½
Calcium bromide, NF, jars, 100 lbs. or more lb. .97 - —
Calcium carbide, standard generator size, 600-lb dms. c.l., dlvd ton.149 00 - —
Calcium carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton.10.50 - —
chalk, whiting 325 mesh, bgs., c.l. works ton.32 00 -34.00
water-grd., ½ to 10 microns, bgs., c.l., works ton.30.00 - —
10 to 20 microns, bgs., c.l., works ton.17.00 -18.00
Precip., dense, bgs., c.l., works. ton.30.00 -35.00
bgs., l.c.l., works ton 45.00 -50.00
medium, bgs. c.l., works ton 38 00 —
bgs., l.c.l., works ton 48.00 - —
surface treated, bgs., c.l., works. ton.40.00 -42.00
bgs., l.c.l., works ton.55.00 -57.00
ultrafine, bgs., c.l., works ton.117.50 167.50
bgs., l.c.l., works ton.137.50 -187.50
Calcium chloride, conc., flake or pellet, 94-97%, paper bgs., c.l., works, frt. equald ton.37.80 - —
Flake, 77-80%, paper bgs., c.l., works, frt. equald ton.31.00 - —
Liquor, 40%, tanks, frt. equald.ton.12.50 - —
Powd., 77% min., paper bgs., c.l., works, frt. equald .ton.37.00 - —
Purif., gran., dms .....lb. .27 - —

Calcium chloride, solid, 73-75%, dms., c.l., frt. equald..ton.29.50 - —
dms., l.c.l., works, frt. equald. ton.36 00 -73.00
USP, gran., dms. ..... lb. .32 - —
Calcium chromate, bgs., dlvd lb. .37 - —
Calcium cyanide, dms., c.l., dlvd. E. of Rockies lb. .20 - —
dms., l.c.l., same basis ..... lb. .24 - .55
Calcium cyclamate 100-lb dms lb 1.95 - —
Calcium gluconate, USP, AA grade, 150-lb. dm., ton lb. .73½- —
USP, powd., 150-lb. dm, ton lb. .66½- —
Calcium hydride, lump, dms. works. lb. 2.20 - 3.00
Calcium hypochlorite, high test, gran., 45-lb. cs., dlvd. E. of Rockies cs.23.85 -25.60
100-lb. dms., same basis dm.33.30 -36.55
Calcium hypophosphite dms., 1,000-lb lots lb. 1.28 - —
Calcium iodide, jars ..... lb. 4.52 - —
Calcium lactate, NF, dms., f.o.b. works lb. .43 - .48
Calcium mandelate, USP, 150-lb. dm., works ..... lb. 3.25 - —
Calcium naphthenate, liq., 4% Ca., dms. frt. equald lb. .30 - —
Calcium pantothenate, USP, jars, 1 kilo or more kilo.35.00 - —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate)
Calcium phenolsulfonate dms lb 1.24 - 1.25
Calcium phosphate, dibasic, USP, bgs., c.l., frt equald 100 lbs.16.00 - —
Dibasic, feed grade, 18½% P, bgs., c.l., t.l., frt. equald ton.86.00 - —
bgs., c.l., t.l. f.o.b. Texas City works ton.80.50 - —
bgs., l.c.l., frt. equald ton.96.00 - —

Calcium phosphate, dibasic, feed grade, 21% P., bgs., c.l., t.l., frt. equald..ton.97.65 - —
bgs., l.c.l., frt. equald ton.107.65 - —
Prices of calcium phosphate dibasic in bulk $3 per ton less than bg., c.l. prices
Calcium phosphate, monobasic, bgs., 10,000-lb. lots, frt. equald. 100 lbs 7.45 - —
bgs., smaller lots, same basis, 100 lbs 7.95 - —
Tribasic NF, precip., bgs., c.l., works, frt. equald 100 lbs. 9.25 - —
bgs., l.c.l., frt. equald. 100 lbs.10.00 - —
Calcium phytate bgs., 50 lbs. or more, f.o.b. warehouse N. Y lb. .39 - —
Calcium resinate precip. dms ton lots, frt. alld., works lb. .40¼- —
Calcium silicate hydrated, bgs., c.l., works lb. .08 - —
bgs., l.c.l., works ..... lb. .06½- —
Calcium silicate, paint grade (see Wollastonite)
Calcium stearate, ctns. c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb 40 - .44
Calcium sulfate (see Gypsum)
Calomel, NF, mild, powd., dms., 100-lbs., f.o.b. works lb. 5.42 - —
NF, mild, precip., dms., 100-lbs., f.o.b. works lb. 5.67 - —

Camphene 46° m.p. dms incl. c.l., works lb 13 —
dms. incl., l.c.l. same basis lb 16½ —
tanks, same basis lb 12½ —
Camphene, chlorinated 67-69% (see Toxaphene)
Camphor, monobromated, NF, dms., kgs lb 3 63 3 70
Nat., USP, powd., cs., 100-lb. lots, lb. .60 - 65
tablets, 1-oz. cs lb 85 90
Nat., USP, gran., bbls., 2,000-lb. lots, lb. 59 - —
Syn., tech., 1 bbl. or more lb. .48 - —
Syn. USP gran., powd., bbls., 1,000-lb lots lb 60 - —
bbls. smaller lots lb 61 - —
tablets, ctns., 1,000-lb. lots, lb. 85 - —
ctns 500-lb lots lb 86 —
ctns smaller lots lb 87 —
Camphor oil, sassafrassy dms. lb .35 .55
White dms lb 25 50
Cananga oil, native, cns ..... lb. 5.00 - 6.50
Rectified, cns. ..... lb 7.25 -10 00
Candelilla wax, crude, bgs. ..... lb. No offers
Refd., pure, bgs. ..... lb. .67 - .68
Powdered Candelilla wax 20 to 100 mesh, 8c higher
Cantharides, Chinese, cs ..... lb. 1.00 - —
powd., bgs. ..... lb. 1.15 - —
Russian, bgs. ..... lb. 2.00 - 2.15
powd., bgs. ..... lb. 2.15 - 2.30
Capric acid, dms ..... lb 35½ 38
tanks ..... lb. .33 - .34½
Caprolactum monomer, bgs., c.l., t.l., f.o.b. works lb. .52 - —
bgs., l.c.l., l.t.l., same basis ... lb. .57 - —
tanks, same basis ..... lb. .49 - —
Capryl alcohol, 85% dms., c.l., and t.l., works lb .19 —
dms., t.l.t. same basis ..... lb. .19½ —
tanks, frt equald lb .16½ —
Sec. 92-99%, dms., c.l., f.o.b. works. lb. .22 - —
dms., l.c.l., f.o.b. works .. lb. .23 - —
tanks, f.o.b. works ..... lb. .19½- —
Caprylic acid, dms ..... lb. 35½ 38
tanks ..... lb. .33 - —
Capsicum (see Pepper red)
Capsicum oil (see Capsicum oleoresin)
Capsicum oleoresin, NF, from dom pepper, dms lb. 4.00 - —
NF, from African pepper, dms. lb 4.50 —
Caraway oil, NF, dms. ..... lb. 3.15 - 3.40
Caraway seed, Danish, bgs .... lb. .16 —
Dutch, bgs. ..... lb. .17½- —
Polish, bgs. ..... lb. .17¼- —
Carbazole, 97%, bbls., ton lots, works lb 1.05 - —
Carbon black, channel, rubber beads, bulk, c.l., works lb. .08 - —
bgs., c.l., works ..... lb. .08½- —
bgs., l.c.l., works ..... lb. .16¼- —
Furnace, fast extruding, bgs., c.l., works lb. .06¾- —
ctns., l.c.l., whse. lb. 1.5½ —
high abrasion, bulk, c.l., works. lb. .07¼- —
bgs., c.l. works ..... lb. .07¾ —
bgs., l.c.l., dlvd. or whse lb. .14½ —
high modulus, bgs., c.l., works. lb .08¾ —
ctns., l.c.l., whse. ..... lb. .13 - —
semi-reinforcing, bgs., c.l., works. lb .05¾ —
bgs., ctns., l.c.l., whse. lb. .12½ —
Carbon black, pigment, high color beads, ctns., c.l., works lb 72 - —
ctns., l.c.l., dlvd. or whse lb 79 - —
medium color, uncompressed bgs., c.l., works lb. .14 - —
bgs., l.c.l., dlvd. or whse lb. .22½- —
Carbon dioxide, indust. wholesale, bulk, 30,000-2,999,999 lbs., dlvd Metropolitan areas, E ton 60.00 -115 00
bulk, 3,000,000 lbs. of more, dlvd., Metropolitan areas, E ton.55.00 - —
Solid, bulk, wholesale, works ton 85 00 - —
Carbon disulfide, 55-gal. dms., c.l., works, frt. equald to competitive points lb .071 —
55-gal. dms., l.c.l., same basis lb. .086 .091
5-gal. dms. 30 dms to c.l., same basis lb. .131 - —
5-gal. dms., less than 30 dms., same basis lb. .161 - —
tanks, dlvd. ..... lb. .0345 —
Carbon tetrachloride, CP, consumers, dms., c.l., frt. alld lb. .12¾- —
dms., l.c.l., frt. alld ..... lb. .15¼ —
Tech., consumers, dms., c.l., t.l., frt. alld lb. .11¾- —
dms., l.c.l., l.t.l., frt. alld lb. .14¼ —
tanks, frt. alld ..... lb. .10¼- .11¼
Carboxymethyl cellulose (see CMC)
Carbromal, NF, dms., 100-lb. lots, works lb 4 00 4.25
dms smaller lots, works .. lb 4.10 4.75
Cardamom oil, NF, bots. ..... lb 39.00 -42 00
Cardamom seed, bleached "A" lb. 3.20 - —
Bleached "B" ..... lb. 3.10 - —
Decorticated Alleppey, cs ... lb. 2.30 - —
Guatemala, cs. ..... lb. 3.15 - —
Green, Alleppey, bgs ..... lb. 2.05 - —
Ceylon, bgs. ..... lb. 2.15 - —
Carmine No. 40, NF, bulk, 100-lb lots or more, dlvd. ... lb 16.80 —
bulk, smaller lots, dlvd. ... lb 16.90 -17 30
Carnauba wax, chalky, bgs., ton lots lb. .70 Nom.
North country, No. 2, crude, bgs., ton lots lb. .80 - .81
refd., pure, ton lots .... lb. .90 - .92
North country, No. 3, Ceara, ton lots lb. .70 - .71
Ceara, refd., pure, bgs., ton lots lb. .80 - .81
North country, No. 3, Parnahyba, ton lots lb. .72 - .73
Parnahyba, refd., pure, bgs., lots lb. .80 - .81
North country, No. 1, Ceara, yellow, bgs., ton lots lb. 1.03 - 1.07
Parnahyba, yellow, bgs., ton lots. lb. 1.05 - 1.07
Powdered carnauba wax, 20 to 100 mesh, 8c, higher.
Carotene, tech., 1,350,000 A units per gram, tins 5-10 kilo lots, dlvd gram. .20½- —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units. .12 - —
USP microcrystalline in oil, 400,000 A units per gram, dms., dlvd million units. .144 - —
b-Carotene, in vegetable oil, semi-solid suspension, 400,000 A units per gram cns kilo.57 60 - —
Liquid in vegetable oil, 500,000 A units per gram cns kilo.72 00 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram., cns. kilo.240.00 - —


# PURITY STANDARDS WITH DICALITE FILTERAIDS

## DICALITE OFFERS NEW CUSTOMIZED FILTERAID SERVICE

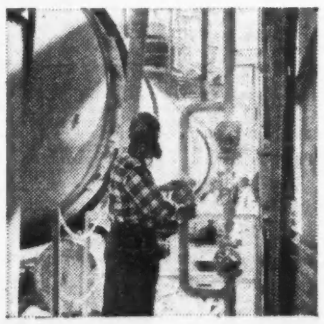
Today, standards of purity are tightening in every field—and tomorrow's will be higher still. But you can confidently meet both with the high-efficiency filteraids which Dicalite is producing right now.

Today, with new processing advances made through continuing research, Dicalite can custom-engineer a filteraid made to precisely match your individual purity problem.

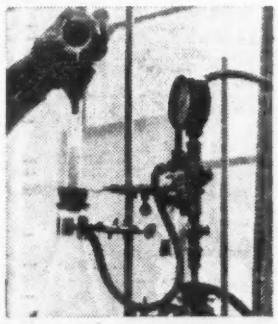
If your filtration must be so sharp that it removes particles too small to be seen with the optical microscope, a Dicalite Filteraid can do it. Or, if fast flow rates and increased production are your need, Dicalite can help you achieve that.

Your Dicalite man will be glad to advise with you on any filtration problem and help you determine if a customized filteraid will advance your processing.

Careful strata selection provides the best crude for each filteraid's final requirements.



New processing refinements, including special calcining methods, control filteraid characteristics with an accuracy never before possible in any plant.



With more than 22,000 quality control tests every month, the Dicalite plant laboratories hold every filteraid grade to rigid specifications.

New automatically-controlled packing and pressure-palletizing is the final step in efficient modern operation.

Dicalite®
Dicalite Department
Great Lakes Carbon Corporation
*612 So. Flower Street, Los Angeles 17, Calif.*

The product I am filtering is _____

Have Dicalite man phone for appointment ☐ Send Information ☐

NAME _____

TITLE _____

COMPANY _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

Carvol, bots. lb 5.00 - 5.40
Cascara sagrada bark, bulk lb. .34 - .36
Casein, dom., edible, acid precip., 30 mesh., bgs., 10,000-lb. lots or more, works lb. .56 - —
edible, acid, precip., 80 mesh, bgs., 10,000-lb lots or more, works lb. .64 - —
Imp., inedible, acid-precip., grd., Argentine, bgs., c.l., ex-dock, Eastern seaports lb. .18¾- .19
New Zealand, bgs., c.l., same basis lb. .24 - —
Cashewnut shell, liquid, treated, dms., c.l., Newark, N. J lb. .22 - —
dms. ton lots same basis lb .23 - —
dms. dm lots, same basis lb .25 - —
Cassella acid, dms, frt alld, 100% basis lb 1.65 1.75
Cassia Padang, "A," bls lb .30 - —
"B," bls lb 29 - —
"C," bls lb 28 - —
Korintje "A," bls lb. .34 - —
"B," bls. lb. .30 - —
"C," bls. lb. .30 - —
Cassia oil (see Cinnamon leaf oil USP)
Castor oil dom. blown dms. c.l. dms. c.l. lb .2550- —
dehydrated bodied, dms. c.l. lb 2650- —
dms., l.c.l. lb 2700- —
tanks lb 2650- —
dehydrated, unbodied, dms., c.l. lb 2500- —
dms., l.c.l. lb 2500- —
tanks lb 2660- —
hydrogenated, bgs., c.l. lb 2360- —
bgs., ton lots lb .2450- —
bgs., l.c.l. dlvd lb 2650- —
No. 1, dms., c.l. lb .3050- —
dms., l.c.l. lb .2150- —
tanks lb 2250- —
No. 3, tech., dms., c.l. lb. .17½- —
dms., l.c.l. lb. .2125- —
tanks lb 2225- —
refd., deod., dms., c.l. lb 1925- —
dms., l.c.l. lb. .2650- —
USP, dms., c.l. lb. .2750- —
dms., l.c.l. lb. .2350- —
tanks lb 2450- —
Imported, No. 1, Braz., tanks lb 2150- —
Sulfonated, 50%, dms., works lb. .18 - .18¼
75%, dms., works lb. .15 - .15¼
Castor oil acids, dehydrated, dms Split dms lb 44¼ 46¼
Castor pomace, bgs. c.l. works ton 35 00 38¼
Castoreum nat. cns. lb 5 25 - —
Syn. cns lb 9 00 - —
Catechol, CP, cryst., fib., dms., works lb. 2 17½- —
Resub. dms. works lb 4 29½ —
Catnip leaves, Southern, bls lb. Nom.
Caustic potash (see Potash caustic)
Caustic soda (see Soda, caustic)
Cedarleaf oil USP XIII cns. dms lb. 2.50 - 3.10
Cedarwood oil, cns., dms lb. .65 - .70
Celery seed, French, bgs lb .33 - —
Indian, bgs lb .19 - —
Cellulose acetate, flake, powd, bgs ctns., 100-lb lots or more dlvd E lb .35 .45
Cellulose acetate butyrate, powd., 17% butyryl content, bgs., dlvd E lb .545 .555
27% butyryl content bgs dlvd E lb .595 .605
38% butyryl content, bgs. dlvd, E lb. .545 .555
38% butyryl content half-second, bgs dlvd E lb .545 .555
50% butyryl content bgs dlvd, E lb .585 .595
Cellulose gum, methyl (see Methyl Cellulose)
Cellulose gum, pure high vis bgs., 23,000 lb lots or more works, frt alld lb .57 - —
bgs., smaller lots, same basis lb. .59 - —
Cerium chloride (see Rare Earth Chloride).
Cerium chloride 46% dms dlvd lb .25 - —
Cerium hydrate 74% CeO fib dms., 100 lb lots or more lb 1.40 - —
77% CeO fib dms 100 lb lots or more lb 1.74 - —
Cerium oxalate (see Rare earth oxalate)
Cerium oxide, optical grade, bgs., 50-lb lots or more dlvd lb 1.85 1.90
bgs., smaller lots, dlvd lb. 2.15 - —
Cetyl alcohol NF fib cns, c.l., t.l., dlvd E lb .41½ —
fib cns, l.c.l., same basis lb .43½- —
tanks, same basis lb .39 - —
Extra, cns., c.l., t.l., dlvd. E lb. .48½- —
fib cns, l.c.l., same basis lb .50½- —
tanks, same basis lb .46 - —
Chalk (see Calcium carbonate)
Chamomile flowers, Hungarian, bls lb. 1.25 - —
Roman, cs. lb. 1.50 - 1.75
Chamomile oil, blue Hungarian, bots lb 350 00 —
Charcoal, activated, NF fib dms., c.l. works lb .25 .32
fib dms. 5-ton lots, works lb. 26½ 32½
fib dms. smaller lots works lb. .27 .50
Charcoal, black (see Charcoal, activated)
Charcoal, bone (see Bone black).
Charcoal hardwood lump bulk, c.l., f.o.b. plant ton 55 00 - —
briquets bulk, c.l. f.o.b. plant ton 78 00 80.00
5-lb. paper bgs., c.l., same basis ton 106 00 - —
25-lb paper bgs. c.l., f.o.b plant ton 87 00 - —
40-lb paper bgs. c.l., same basis ton 84.00 - —
Chenopodium oil NF cns lb 4 15 5.00
Chicago acid paste, bbls frt. alld lb 3.21 - —
Chinawood oil (see Tung oil).
Chloral, tech 94% min. dms., c.l., works lb .23 - —
dms., l.c.l., works lb .24 - —
tanks multiple units, 5 cars, works lb .21 - —
Chloral hydrate USP jars, 1,000-lb lots lb 1.00 - —
jars, 500-lb lots lb 1.03 - —
jars, 100-lb lots or less lb 1.05 - —
Chlordan, agricultural dms., c.l., frt alld lb .65 - —
dms l.c.l 5,000 to 10,000-lb lots, frt alld lb .66 - —
Clarified, dms., c.l., frt. alld lb. .63 - —
dms. l.c.l. 5,000-10,000-lb lots, frt alld lb 70 —
Chlorinated paraffin, 42%, dms., c.l. frt alld lb. .16¼- —
dms l.c.l. 10 dms or more, same basis lb. .17¼- —
70%, dms., c.l., same basis lb. .18½- —
dms l.c.l 10 dms or more, same basis lb. .19½- —
Chlorinated rubber, 5, 10, 20 cps., ctns., c.l., works lb. 60 - —
ctns., l.c.l., works lb. 61 - —
125, 1,000 cps., ctns., c.l., works. ctns. l.c.l., works lb. .70 - —
Chlorine, liq., cyls., c.l., works, frt equald lb. .11 - —
cyls. l.c.l. Metropolitan area lb. .12¼ .13¾
tanks, single units, works, frt. equald 100 lbs 3.15 - —
tanks, multiple units, 5 cars, works, frt equald 100 lbs 4.05 - —
tanks, multiple units, 4 cars, same basis 100 lbs 4.25 - —
tanks, multiple units, 2 cars, same basis 100 lbs 5.25 5.75
tanks, multiple units,, 1 car, same basis 100 lbs. 6.25 - 7.25
Chloroacetic acid mono, flake, 99%, purif., c.l lb. .23½- .25½
tech flake, 96-97% dms., c.l., frt equald lb 24½ —
dms. l.c.l. frt equald lb .19 - —
2-Chloro-4-aminotoluene tech., liq., dms., frt alld lb 1.03 - —
4-Chloro-2-aminotoluene fused bbls. lb 1.38 - —
6-Chloro-2-aminotoluene tech., liq., dms., frt alld lb .66 - —
m-Chloroaniline dms. c.l. frt alld. dms., l.c.l., same basis lb 75 - —
tanks, same basis lb 77 - —
o-Chloroaniline dms. c.l. frt alld. lb 73 - —
dms., l.c.l., same basis lb .52 - —
tanks, same basis lb .54 - —
p-Chloroaniline dms. c.l. frt alld. lb 50 - —
dms., l.c.l., same basis lb 77 - —
o-Chlorobenzaldehyde, dms., t.l., works lb. 1.05 - —
dms., l.c.l., same basis lb 1.20 - —
p-Chlorobenzaldehyde, dms l.c.l., works lb. 1.95 - —
o-Chlorobenzoic acid fib dms., t.l., works lb 1.10 - —
fib. dms., smaller lots works lb 1.25 - —
p-Chlorobenzoic acid, fib dms., 2,000-lbs or more, works lb 2.25 - —
fib dms., less than 2,000-lbs., same basis lb 2.30 - —
Chloroform, tech. dms. c.l. dlvd E lb 18 - —
dms., l.c.l., same basis lb 19 - —
tanks, same basis lb 17 - —
USP, dms., c.l., dlvd lb. .27 - —
dms., l.c.l., dlvd lb. .30 - —
tanks, minimum 4,000 gals. dlvd lb .25 - —
2-Chloro-4-nitroaniline, paste, dlvd. E 100% basis lb 81 - —
Powd dlvd & 100% basis lb 86½- —
4-Chloro-2-nitroaniline powd dlvd E lb. .86 - —
4-Chloro-2-nitrophenol tech. paste, dms. frt alld lb. 75 - —
4-Chloro-2-nitrotoluene tech., solid, dms. frt alld lb. .99 - —
6-Chloro-2-nitrotoluene tech., solid, dms. frt alld lb .17 - —
o-Chlorophenol, dms., c.l., frt. equald lb .37 - —
dms. l.c.l. same basis lb .38 - —
p-Chlorophenol, dms., c.l., frt. equald lb .37 - —
dms. l.c.l. same basis lb .38 - —
Chloropicrin coml. cyls., 150 lbs. frt alld lb 1.07 - —
cyls. 100 lbs. same basis lb 1.08 - —
cyls., 50 lbs., same basis lb 1.14 - —
Chlorosulfonic acid, dms., c.l., frt. equald lb .0465- —
tanks, frt equald lb .0515- —
Chlorosulfonic acid, in stainless steel dms ½c per lb higher
o-Chlorotoluene tech. dms., t.l., works lb .37 - —
dms. l.c.l., t.l.l. same basis lb .38 - —
Choline bitartrate, fib dms, frt. adjusted kilo 2.75 3.00
Choline chloride fib dms, frt. adjusted kilo 2.75 3.00
Choline dihydrogen citrate, fib. dms., frt adjusted kilo 2.75 3.00
Chrome green, CP dark, light medium blue content 1-15%, bbls., dlvd. E. of Rockies lb. .43 - —
blue content 16-30%, bbls., same basis lb. .44 - —
blue content 31-45%, bbls., same basis lb. .44 - —
blue content 45-49%, bbls., same basis lb. .45 - —
Reduced color 25% lb. .20 - —
Chrome green prices 1c higher W of Rockies.
Chrome orange CP bbls., dlvd E. of Rockies lb. .35 - —
Chrome orange prices 1c higher W of Rockies.
Chrome yellow CP bbls., dlvd E. of Rockies lb. .35 - —
Chrome yellow price 1c higher W. of Rockies
Chromic acid, 99¾%, dms., c.l., works, frt equald lb. .29½- —
dms. l.c.l. dlvd. N. Y. Metropolitan area lb. .30 - .31
Chromic acid, NF (see Chromium trioxide)
Chromium acetate, soln., 7½%, dms. 500-2,000-lb lots, works. lb. .10 - —
Chromium fluoride, bbls., works lb. .51 - .52
Chromium oxide, hydrated, bbls., fib dms. c.l. frt alld lb 1.20 - —
Pure, bgs., c.l., frt alld lb. .44½- —
bgs., l.c.l., same basis lb. .45¼- —
Chromium trioxide NF bots lb. 1.15 - —
Cinchona bark NF red, broken, NF yellow broken, bgs. lb. .25 - —
Cinnamic acid refd bots lb. .35 - .40
Cinnamic alcohol, bots. lb 2.50 3.50
Cinnamic aldehyde, dms lb 1.75 - 2.20
Cinnamon, Ceylon, No. 2, bgs lb. 92 1.25
Ceylon, No. "0000," bgs lb. .62 - —
Cinnamon bark oil, bots lb. 78 - —
Cinnamon leaf oil, crude, dms lb. 1.60 - 2.00
USP (Cassia) cns. dms lb 8.50 13.50
Citral, CP, bots. lb. 3.75 - 4.25
Extra, bots. lb. 4.50 - 6.10
Citric acid USP anhyd., fine gran., bgs., dms., c.l lb. .29½- .30
bgs., dms., 10,000-lb. lots, 1 shipt lb. .30 - .30½
bgs., dms., smaller lots lb. .30½- .31
USP, hydrous, fine gran., bgs., dms., c.l lb. .27½- .28
bgs., dms., 10,000-lb. lots, 1 shipt lb. .28 - .28½
bgs., dms., smaller lots lb. .29 - .29½
Powdered citric acid ½c. per lb higher.
Citronella oil, Ceylon, dms lb. .90 - 1.05
Java-type, dms. lb. .85 - 1.25
Citronellal, bots., dms lb 1.60 - 2.10
Citronellol, bots., dms lb. 2.30 - 3.70
Civet, artif. bots. lb 13.75 -15.00
Nat. bots oz. 8.50 -15.00
Clay, ball, dom., airfloated, bgs. c.l., Tenn ton.17.50 -21.50
crushed shed moisture, bulk, c.l. Tenn ton 8.00 -11.00
imp., airfloated, bgs., c.l., Atl. port net-ton.42.00 -45.75
lump, bulk, Atl port net-ton.29.50 -35.75
Clay, China, dom., dry-grd. air-floated, 98% 325 mesh, Georgia bgs. c.l., works.ton.10.00 -12.00
Georgia, bgs. l.c.l works. ton 15.50 —
dom., airfloated, 99%, 300 mesh bgs., c.l., Georgia, works. ton.13.50 -14.50
bgs. l.c.l. ex-whse ton.35.00 -36.00
imp., white, lump, bulk, c.l., ex-dock, Philadelphia, Portland, Me long-ton.20.00 -35.00
white, powd., bgs., c.l., ex dock. net-ton.50.00 —
bgs., l.c.l. ex whse net-ton.60.00 -70.00
Cleaners Naphtha petroleum, 105°F Flash, tankcars, New Jersey and New York gal. .18 - —
Group 3 gal. .12875- —
Houston, Texas gal. .145 - —
140°F Flash, tankcars, New Jersey or New York gal. .205 - —
Group 3 gal. .154 - —
Houston, Texas gal. .17 - —
Cleve's acid, tech., mixed, solid, dms., frt. alld lb. 1.05 - —
1,6, tech, solid, dms., frt. alld lb. .77 - —
1,7, tech., dms., frt alld. lb. 2.20 - —
Cloves, Madagascar, bgs lb. .40½- —
Zanzibar, bgs. lb. .42½- —
Clove bud oil, USP, dms lb. 2.70 - 3.60
Clove leaf oil, crude, dms lb. 1.35 - 1.80
CMC, crude, 96.4% low or medium vis. bgs. or fib dms., 23,000 lbs., dlvd. E., 100% basis lb. .41½- —
96.4% low or medium vis., bgs. or fib. dms., 23,000 lbs. dlvd E., 100% basis lb. .43½- —
65% low or medium vis., bgs., or fib. dms., c.l., dlvd. E., 100% basis lb. .41¼- —
bgs. or fib. dms., l.c.l., dlvd. E., 100% basis lb. .43½- —
CMC, purif, high vis. (see Cellulose gum)
CMC, standard low or medium vis., bgs. 23,000 lbs., works, frt. alld lb. .57 - —
bgs. smaller lots same basis. lb. .59 - —
CMC prices W of the Rockies are 2c. per lb lower and are on a works basis.
Coaltar, crude, resale for solns., tanks, works gal. .17 - —
Refd., resale, indust., dms., c.l., ex whse gal. .35 - —
dms., l.c.l., ex whse. gal. .39 - —
tanks works gal. 20½- —
Coaltar pitch aluminum, bulk, works ton 44.00 - —
Carbon and indust, bulk, works ton 44.00 - —
Core, bulk, works ton.40.50 - —
Fiber bulk, works ton.48.00 - —
Roofing, 140-155°F Federal Specification RP-381 Type I, tanks, works ton.41.00 - —
Cobalt acetate, 23.7% Co., dms. dlvd lb. 1.04 - —
Cobalt blue genuine 250 lb bbls., dlvd. E. of Rockies lb 4.90 - —
Cobalt blue prices 1c. higher W. of Rockies.
Cobalt blue, imitation (see Ultramarine blue).
Cobalt carbonate, 48% Co., powd., bgs., dlvd lb. 1.45 - —
Cobalt chloride, 24.2% Co., dms., dlvd lb. .99 - —
Cobalt hydrate, 60-61% Co., dms., dlvd lb. 2.05 - —
Cobalt linoleate, fused 8½% Co., dms lb. .71½- —
Liq. 6% Co. dms. lb. .57½- —
Cobalt metal, 97-99%, dms., f.o.b. carrier lb. 1.75 - —
Cobalt naphthenate, liq. 6% Co., dms. dlvd lb. .48¾- —
Cobalt nitrate, 20.1% Co. bbls., dlvd. lb. .80 - —
Cobalt oxide black, ceramic grade, 72½-73½% Co., kgs., dlvd. E. of Mississippi R lb. 1.33 - —
70-71% Co. kgs same basis lb. 1.29 - —
Cobalt oxide prices W. of Mississippi R. 3c. per pound higher.
Cobalt phosphate, powd., 32.1% Co., dms., dlvd lb 1.35 - —
Cobalt resinate, fused, 3% Co., dms. lb. .33½- —
Cobalt sulfate, cryst. 21% Co., dms. dlvd lb. .64 - —
Monohydrated, 33% Co., dms., dlvd lb. 1.09 - —
Cobalt tallate, 6% Co., dms., dlvd. lb. .41 - —
Cocaine, USP, cns., 100-oz. lots, f.o.b. works oz.17.50 - —
Cocaine hydrochloride, cns., 100-oz. lots, f.o.b. works oz.13.75 - —
Cocillana bark, bls lb. .18 - .20
Cocoa butter, bgs. lb. .58 - .63
Coconut oil, crude, tanks, New York, tanks, Pac. coast lb. .19¼- —
Refd., deodorized, dms. lb. .17½- —
Coconut oil acids, dist., dms. lb. .26 - .27
tanks lb. .30½ - .33
Double dist. (stripped), dms. lb. .28 - —
tanks lb. .31½ - .34
Cod oil, dms., spot lb. .29 - —
Codeine, NF, cns., 100-oz. lots oz.13.25 - —
Codeine hydrochloride, cns., 100-oz. lots oz.11.75 - —
Codeine phosphate, USP, cns., 100-oz. lots oz.10.25 - —
Codeine sulfate, USP, cns., 100-oz. lots oz.10.75 - —
Codliver oil, USP, dms. gal. 1.40 - 1.70
Cohosh root, black, bls lb. .20 - .25
Blue, bls. lb. .20 - .25
Colchicine, USP, bots oz.29.00 - —
Colchicum root, bls lb. .35 - .45
Colchicum seed, bgs lb. 1.00 - 1.25
Collodion, USP, dms. lb. .32½- —
USP, flexible, dms lb. .32½- —
Colocynth pulp, bls lb. .34 - —
Colombo root, bls lb. .75 - —
Condurango bark, bls lb. .16 - .18
Congo copal gum, No. 1, bgs lb. .18 - .20
No. 2 bgs. lb. .25 - .27
No. 3, bgs. lb .22 - .24
Copaiba balsam, cns., dms lb. .17 - .20
Copaiba oil, cns. lb. .60 - .63
Copper acetate, bbls., c.l., works. bbls., l.c.l., works lb. .53 - —
Copper carbonate, 55%, bgs., c.l., bgs., l.c.l., works lb. .3635- —
Copper chloride, cupric, anhyd., dms., works lb. .3785- —
cryst., dihydrate, dms., works. lb. .45½- .46
cryst., dried, dms., works lb. .31 - .31½
Copper chloride, cuprous, dms., works lb. .59¼- .59¾
Copper cyanide, tech., dms., 20,000-lb lots or more lb. .4135- .4435
dms., 1,000-lb lots or more lb. .609 - —
dms., smaller lots lb. .619 - —
Copper gluconate, dms lb. .639 - .65
Copper hydrate dms, c.l., frt. alld. lb. 3.20 - —
dms., l.c.l., same basis lb. .51¾- —
Copper metal, electrolytic, dlvd. E of Miss Valley basis lb. .52¼- —
copper naphthenate, liq., 8% Cu, dms., frt alld lb. .33 - .36
Copper nitrate, tech., cryst., dms., works lb. .26½- —
Copper oleate solid 9% Cu, dms., works lb. .30¾- .32¾
Copper oxide, black, bbls., 100-5,000-lb lots, works lb. .49¼- —
Copper oxide, red 97%, USN Type I, bbls., 100-5,000-lb. lots lb. .45 - —
96%, USN Type II, bbls. 100-5,000-lb lots or more, works. lb. .50½- —
Copper quinolinolate, 18% Cu, dms., ton lots lb. .481½- —
10% active quinolinolate, dms lb. 4.25 - —
Copper resinate, precip, dms., frt. alld lb. 1.14 1.15
Copper sulfate, CP, gran., dms., works lb. .41½- —
Cryst., 99%, bgs., c.l., works. lb. .1885- —
bgs., l.c.l., works 100 lbs.13.00 - —
Copper sulfate, monohydrated, 35% dms., c.l., works 100 lbs.13.25 -15.75
dms., l.c.l., works 100 lbs.24.00 - —
Copper sulfate, tribasic distributors, bgs., c.l., works 100 lbs.24.75 - —
bgs., l.c.l., works 100 lbs.29.60 - —
Copper undecylenate dms 100 lbs.31.10 - —
Copra, Atl., Gulf ports, c.i.f. lb 2.75 - —
Pac. ports, c.i.f. lb.240.50 - —
Coriander oil, USP, bots lb.237.50 - —
Coriander seed, Moroccan, bgs lb. 9.00 -10.00
Rumanian, bgs. lb. .08 - —
Yugoslavian, bgs. lb. .07½- —
Corn oil, crude, tanks, works lb. .08½- —
Foots (soapstock), acid 95%, tanks, New York lb. .13⅛- —
Refd., salad, dms. lb. .05¼- —
tanks lb. .1885- .1910
Corn oil, acids, dist., dms. lb. .1685- —
tanks lb. .16¾- .19¼
Corn sugar, tanners, chipped, paper bgs., c.l. 60,000 lbs. min. lb. .14¼- —
paper bgs., l.c.l 100 lbs. 7.30 - —
Corn syrup, 42° Be., non-ret. dms., c.l 100 lbs. 7.45 - —
non-ret. dms., l.c.l. 100 lbs. 7.31 - —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, USP, bots., kilo or more gram. 1.05 - 1.90
oz 6.00 - —
Costus oil, bots.
Cottonseed meal, 41%, bgs., Memphis ton.58.00 - —
Cottonseed oil, crude, tanks, South tanks, Valley East lb. .09¼- .09¾
tanks, Texas, Lubbock lb. .09⅛- —
tanks, Texas, Waco lb. .09 - —
Foots (soapstock), acid 95% tanks, New York lb. .09⅛- —
Refd., salad, dms. lb. .04 - —
tanks lb. .14¼- .14½
Cottonseed oil acids, dist., dms lb. .12¾- —
tanks lb. .16¾- .19¼
Coumarin, NF, cryst., dms lb. .14¼- —
Cramp bark, NF, bls lb. 3.30 - —
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF bots chys. lb. .50 - 1.00
Creosote, coaltar, crude, tanks, works, frt. adjusted gal. 3.05 - 3.26
Crude, soln. 80%, tanks, works, frt. adjusted gal. .24 - —
Refd., dms., c.l., works gal. .226 - —
dms., l.c.l., same basis gal. .50 - —
tanks, same basis gal. .62 - —
West Coast creosote prices computed on a basis of 24c. per gallon for straight oil and 20c. per gallon for coaltar.
Creosote, beechwood, chys., dms., f.o.b., works, dlvd. in Metropolitan area lb. 1.72 - 1.77
Hardwood, NF, chys. dms., same basis lb. 1.42 - 1.47
Pinewood, dms., incl., c.l., works dms incl., l.c.l., works lb. .0561- —
dms. incl., l.c.l., ex whse, New York lb. .0634- —
tanks, works lb. .0745- —
Creosote oil (see Creosote coaltar).
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt alld lb .16½- —
non-ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .145 - —
USP, non-ret. dms., c.l., same basis lb. .18 - —
non-ret. dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .16 - —
m-Cresol, 95-98% dms., c.l., works. lb. .60 - —
dms., l.c.l., works lb. .61 - —
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
2.97% 2°C., dms., c.l., frt. equald. lb. .16 - —
dms., l.c.l., same basis lb. .22 - —
tanks, same basis lb. .23 - —
o-Cresol, 30.5°C. m.p. and over, ret. dms., c.l., frt. equald lb. .17 - —
ret. dms., l.c.l., same basis lb. .18 - —
tanks, same basis lb. .15 - —
30°-30.49°C. m.p., dms., c.l., frt. equald lb. .16½- —
ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .14½- —
29°-29.9°C. m.p., dms., c.l., frt. equald lb. .16 - —
ret. dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .14 - —
25°-28°C. m.p., dms., c.l., frt. equald lb. .15 - —
ret. dms., l.c.l., same basis lb .16 - —
tanks, same basis lb. .13 - —

p-Cresol, 98%, dms., c.l., dlvd lb. .53 • —
dms., l.c.l., dlvd. ..... lb. .53 • —
tanks, dlvd. ..... lb. .49 • —
2,3-Cresotic acid, dms., ton lots, works lb. .70 • —
dms., smaller lots, works .... lb. .72 • —
p-Cresyl methyl ether, cns. .... lb. 1.80 • 2.05
Cresylic acid, coaltar, dom., meta-para content above 25%, resins and tricresyl phosphate grades, dms., c.l., t.l., frt equald gal 1.35 • —
dms., l.c.l., same basis gal. 1.40 • —
tanks, same bassi ..... gal. 1.15 • —
Cresylic acid, coaltar, dom., meta-para content 25% or less, dms., c.l., t.l. same basis gal 1.20 • —
dms., l.c.l., same basis gal. 1.25 • —
tanks, frt. equald ..... gal. 1.00 • —
Cresylic acid, coaltar, imp., meta-para content, 25% or less, f.o.b works, frt. equald, to competitive points, 50 dms or more gal. 1.03½ • —
less than 50 dms., same basis gal. 1.05 • 1.15
tanks, same basis ..... gal. 1.00 • —
Crotonaldehyde, 91-93%, dms., l.c.l., works lb. 25 • —
Crotonic acid, dms. 200 lbs. or more, l.c.l., dlvd ..... lb. .36 • —
Cryolite, nat., indust. bgs., c.l., works 100 lbs. 13.00 • —
bgs., l.c.l. works 100 lbs. 14.25 • —
Cube root powd., 5% rotenone, bgs., t.l., works lb. .21 • —
bgs., l.t.l., works ..... lb. .22 • —
Cuneb berries, NF, bgs. ..... lb 1.00 • —
Powd., cs. ..... lb 1.15 • —
Cubeb oil, cns ..... lb. 12.00 • 16.00
Cumene, dms. c.l., works ..... lb 12 • —
dms., l.c.l., works ..... lb 14 • —
tanks works ..... lb .11 • —
Cumin seed, Iranian, bgs. ..... lb. .30 • —
Moroccan, bgs. ..... lb. .31 • —
Turkish, bgs. ..... lb. .27 • —
Cumin seed oil, bots. cns. ..... lb 15.50 • 17.00
Cyanamide, fertilizer, mixing grade, 21% N gran. bgs., Niagara Falls Ont., contract ton 57.00 • —
Fertilizer, pulv., 21% N, bgs., works, unit-ton 2.85 • —
Indust. grade, bgs., c.l., works ton 75.00 • —
bgs., l.c.l., works ton 96.00 • —
Indust. grade, 6-16 mesh, dms., c.l. works ton 120.00 • —
dms., l.c.l., works ton 140.00 • —
Cyclohexane, 99% tech., dms., c.l., dlvd E of Rockies gal. 1.02 • —
dms., l.c.l., same basis gal. 1.10 • —
dms., c.l., dlvd. W of Rockies gal. .77 • —
dms., l.c.l., same basis gal. .85 • —
tanks, works ..... gal. .55 • —
Cyclohexane, 98%, tech., 40-dm. lots or more, f.o.b. works gal. .50 • —
5-39 dms., same basis ..... gal. .60 • —
tanks, same basis ..... gal. .36 • —
Cyclohexanol, tech., dms. c.l., works, frt alld. E lb. .28½ • —
dms. l.c.l., works, same basis. lb. .29½ • —
tanks, works, same basis lb. .26 • —
Cyclohexanone, tech., dms., c.l., works lb. .33½ • —
dms., l.c.l., works ..... lb. .34½ • —
tanks, works ..... lb. .31 • —
Cyclohexylamine, dms., c.l., works. lb. .49 • —
dms., l.c.l., works ..... lb. .50 • —
tanks, works ..... lb. .47 • —
Cypress oil, bots. ..... lb 5.30 • —

## D

2,4-D tech. bgs., dms., c.l., works, frt. equald lb. .40 • —
bgs., dms., l.c.l., same basis lb. .45 • .49
2,4-D butyl ester, dms. c.l. works. lb. .43 • —
dms., l.c.l., same basis ..... lb. .48 • .52
tanks, same basis ..... lb. .42 • —
2,4-D isopropyl ester, dms., c.l., works lb. .43 • —
dms., l.c.l., works ..... lb. .48 • .52
tanks, works ..... lb. .42 • —
Dammar gum, Batavia A. E. cs lb. No stocks.
East India, Batu, bold, bgs. .. lb. .15 • .17
nubs and chips, bgs ..... lb. .09 • .10
black, bold, bgs ..... lb. .15 • .17
nubs and chips, bgs ..... lb. .12¼ • .13½
unscraped bgs. ..... lb. .13 • .14½
pale, chips, bgs ..... lb. .15 • .17
nubs and chips, bgs. ..... lb. .09 • .10
Siam, cs. ..... lb. .30 • .33
Singapore, No. 1, bgs. ..... lb. .34 • .40
No. 2, bgs ..... lb. .29 • .32
No. 3, bgs ..... lb. No stocks.
dust, bgs. ..... lb. .18 • .20
Dandelion root, bls. ..... lb. .28 • .32
DDD, tech., flake, grd., fib. dms., c.l., works lb. .45 • .47
fib. dms., l.c.l., works lb. .46 • .48
DDT, flake or lump, bgs., c.l., dlvd lb. .23 • —
bgs. smaller lots same basis. lb. .25 • —
fib. dms., c.l., same basis .. lb. .24 • —
fib. dms., smaller lots, same basis lb. .26 • —
Powdered DDT 1c. per pound higher.
DDVP (see Dimethyl dichlorovinyl phosphate).
1-Decanol, tech., dms., c.l., dlvd E. lb. .43½ • —
dms., l.c.l., dlvd. E ..... lb. .45½ • —
tanks, dlvd. E ..... lb. .41 • —
Decyl alcohol, mixed isomers, dms., c.l., dlvd lb. .23½ • —
dms., l.c.l., dlvd ..... lb. .25 • —
tanks, dlvd. ..... lb. .21 • —
Perfume grade, bots ..... lb. 1.60 • 2.00
Decyl alcohol, normal (see 1-Decanol)
Deertongue leaves, bls. ..... lb. .55 • .60
Defluorinated phosphate, feed grade, 13% P, paper bgs., c.l. t.l., works ton 53.00 • —
18% P, paper bgs., c.l., works ton 66.25 • 71.80
19% P, paper bgs, works, Houston, Tex., c.l., t.l. ton 74.35 • —
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices
Degras, common (15-17% free fatty acid), 400-lb. dms. lb. .12 • —
Neutral (over 2% free fatty acid), 400-lb. dms. ..... lb. .19 • .23
Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17, dms., c.l., dlvd E of Rockies gal. .69½ • —
dms., l.c.l., same basis .. gal. .74½ • .80½
tanks, dlvd., same basis .. gal. .53½ • —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.

Denatured alcohol, ethyl, proprietary solvent, dms., c.l., dlvd, E. of Rockies gal. .72 • —
dms., l.c.l., same basis ..... gal. .77 • .83
tanks, same basis ..... gal. .56 • —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, SD1, dms., dlvd, E of Rockies gal. .70½ • —
dms., l.c.l., same basis .. gal. .75½ • .81½
tanks, same basis ..... gal. .54½ • —
SD2B, dms., c.l., dlvd. E of Rockies gal. .69 • —
dms., l.c.l., same basis .. gal. .74 • .80
tanks, same basis ..... gal. .53 • —
SD3A, dms., c.l., dlvd. E. of Rockies gal. .68 • —
dms., l.c.l., same basis .. gal. .73 • .79
tanks, same basis ..... gal. .52 • —
SD23A, dms., l.c.l., dlvd. E. of Rockies gal. .70½ • —
dms., l.c.l., same basis .. gal. .75½ • .81½
tanks, same basis ..... gal. .54½ • —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .71 • —
dms., l.c.l., same basis .. gal. .76 • .82
tanks, same basis ..... gal. .55 • —
SD29, dms., c.l., dlvd. E. of Rockies gal. .69½ • —
dms., l.c.l., same basis .. gal. .74½ • .80½
tanks, same basis ..... gal. .53½ • —
SD30, dms., c.l., dlvd. E. of Rockies gal. .68 • —
dms., l.c.l., same basis .. gal. .73 • .79
tanks, same basis ..... gal. .52 • —
SD-35A, dms., c.l., dlvd. E. of Rockies gal. .71 • —
dms., l.c.l., same basis .. gal. .76 • .82
tanks, same basis ..... gal. .55 • —

Denatured alcohol, ethyl, SD-40, dms., c.l., dlvd. E. of Rockies. gal. .70½ • —
dms., l.c.l., same basis .. gal. .75½ • .81½
tanks, same basis ..... gal. .54½ • —
For anhyd. alcohol on above formulas prices are 7c per gal. higher
West coast dlvd prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c. differential on tankcars is maintained
d-Desoxyephedrine hydrochloride, dms lb. 15.00 • 17.00
dl-Desoxyephedrine hydrochloride, dms lb 6.50 • —
Dextrin corn gum, paper bgs., c.l., 100 lbs. 9.38 • —
paper bgs., l.c.l 100 lbs 9.53 • —
canary dark, paper bgs., c.l. 100 lbs. 9.22 • —
paper bgs., l.c.l. 100 lbs. 9.37 • —
Indust. grade, 6-16 mesh, dms., canary light, paper bgs., c.l. 100 lbs. 9.12 • —
paper bgs., l.c.l ... 100 lbs. 9.27 • —
white, paper bgs., c.l 100 lbs 8.96 • —
paper bgs., l.c.l ... 100 lbs. 9.11 • —
Corn dextrin in cotton bgs. 15c. per 100 lbs higher
Dextrose, anhyd., coml., bgs., c.l., 100 lbs. 8.60 • —
bgs., l.c.l. ..... 100 lbs. 8.75 • —
Anhyd., special, aluminum foil lined fib. dms., 200-lb. dms 100 lbs. 14.70 • —
100-lb. dms. ..... 100 lbs. 15.20 • —

Dextrose, hydrated, coml., bgs., c.l., ex whse. 100 lbs. 7.60 • —
bgs., c.l., ex whse .... 100 lbs. 7.75 • —
USP, dms. ..... lb. 19¾ • —
Diacetyl, flavor grade bots ... lb 4.30 • 4.55
Di-sec-amyl phenol, dms., c.l., works lb. .32 • —
dms., l.c.l., works ..... lb. .33 • —
tanks, works ..... lb. 29½ • —
Di-tert-amyl phenol, dms., c.l., works lb. .32 • —
dms., l.c.l., works ..... lb. .33 • —
tanks, works ..... lb. .29½ • —
Diacetone alcohol, acetone-free, dms., c.l., dlvd lb. .15½ • —
dms., l.c.l. dlvd ..... lb. .17 • —
tanks, dlvd ..... lb. .13 • —
Tech., dms., c.l., dlvd ..... lb. .15 • —
dms., l.c.l., dlvd ..... lb. .16½ • —
tanks, dlvd. ..... lb. .12½ • —
Diallylamine, dms., c.l., dlvd .. lb. 98½ • —
dms., l.c.l., dlvd ..... lb 1.00 • —
tanks, dlvd. ..... lb. .96 • —
o-Dianisidine, dry, tech., fib. dms. lb 2.00 • —
Dibenzyl sebacate, dms. c.l. works. lb. .93 • —
dms., l.c.l., same basis ..... lb. .94 • —
tanks same basis ..... lb. .91 • —
Dibromobenzene, bgs., 500-lb. lots. lb. .55 • —


# MONTROSE
## CHEMICAL COMPANY

100 LISTER AVENUE
NEWARK, NEW JERSEY

*Dimethyl Isophthalate*

*Trimethyl Borate — Trimethoxy Boroxine*

*T.C.P. — Tricresyl Phosphate*

*Mono Cresyl Diphenyl Phosphate*

*D.D.T. — Dichloro Diphenyl Trichloroethane*

*Ethyl Silicate 28% — 40%*

*D.D.V.P. — Dimethyl Dichloro Vinyl Phosphate*
*(Minimum 95% Purity)*

EXCLUSIVE SALES AGENTS

**R. W. GREEFF & CO., INC.**
10 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.
1721 TRIBUNE TOWER, CHICAGO, ILLINOIS

**2,6-Di-tert-butyl-p-cresol**, feed grade, c.l., t.l., dms., dlvd . . lb. .65 - —
t.t.l., dms., same basis . . . . lb. .68 - —
Food grade, c.l., t.l., dms., dlvd. lb .65 - —
dms., t.t.l., same basis . . . . lb. .68 - 1.10
Tech., dms., c.l., t.l., dlvd . . lb. .57 - —
dms., t.c.l., same basis . . . . lb. .60 - —
tanks, same basis . . . . . lb. .54 - —
**Dibutyl fumarate** dms., c.l., t.l., dlvd. E lb. .31½- —
dms., t.c.l., t.t.l. dlvd. E . . lb. .33 - —
tanks, dlvd. E . . . . . lb. .29 - —
**Dibutyl maleate**. dms. c.l., t.l., dlvd. E lb. .31½- —
dms., t.c.l., t.t.l., dlvd. E . . lb. .33 - —
tanks, dlvd. E . . . . . lb. .29 - —
**Dibutyl phthalate**, dms., c.l., dlvd. E. lb. .28½- —
dms., t.c.l., same basis lb. .30 - —
tankcars, tanktrucks, 2,000 gals., same basis lb. .26 - —
tanktrucks, 1,000-1,999 gals., same basis lb. .26½- —
**Dibutyl sebacate** dms., c.l. works, lb. .67½- —
dms., t.c.l., works . . . . . lb. .68½- —
tanks, works . . . . . lb. .65½- —
**Dibutyl tartrate**, dms. works, frt. alld lb. .65½- —
**Dibutylamine**, dms. c.l. dlvd lb .55½- —
dms., t.c.l., same basis . . . . lb. .57 - —
tanks, same basis . . . . . lb. .53 - —
**Dicapryl phthalate**, dms. c.l. dlvd. lb. .27½- —
dms., t.c.l., dlvd. . . . . lb. .29 - —
tanks, dlvd. . . . . lb. .25 - —
**Dicapryl sebacate**, dms., c.l., works. lb. .63 - —
dms., t.c.l., works . . . . . lb. .63½- .64
tanks, works . . . . . lb. .61 - —
**2,5-Dichloroaniline**, dms., works lb. .83 - —
**3,4-Dichloroaniline**, tech., solid, tanks, frt. alld lb. .73 - —
**o-Dichlorobenzene**, dms., c.l., frt. alld. E lb. .12¾- —
dms., t.c.l. same basis . . . . . lb. .13¾- —
tanks, same basis . . . . . lb. .11 - —
**p-Dichlorobenzene**, dms. c.l. f.o.b. works, frt. alld E lb. .12 - —
dms. 2,000 lbs. or more same basis. lb. .14½- —
**1,4,-Dichlorobutane** dms. c.l. or t.l., works lb. .33½- —
dms., t.c.l., or t.t.l. works lb. .34 - —
tanks, works . . . . . lb. .32 - —
**Dichlorodiphenyltrichloroethane** (see DDT).
**2,2-Dichloroethyl ether** dms., c.l. t.l., dlvd. E lb. .15½- —
dms., t.c.l., t.t.l., same basis . lb. .17 - —
tanks, same basis . . . . . lb. .13 - —
**Dichloroisocyanuric acid**, dms., c.l., t.l., frt. equald lb. .65 - —
dms., t.c.l., same basis . . . . . lb. .75 - —
**Dichloropentanes**, dist., dms., c.l., works lb. .05 - —
dms., t.c.l., works . . . . . lb. .06 - —
tanks, works . . . . . lb. .03 - —
**Dichlorophenoxyacetic acid** (see 2,4-D).
**Dicyclohexylamine** dms. c.l. works, lb. .54 - —
dms., t.c.l. works . . . . . lb. .55 - —
tanks, works . . . . . lb. .52 - —
**Dicyclohexyl phthalate**, gran., fib. dms., c.l., works frt alld, lb. .46½- —
fib. dms. t.c.l., same basis lb. .48 - —
**Dicyclopentadiene**, dms., c.l., f.o.b. works lb. .14½- —
dms., t.c.l., same basis . . . . . lb. .14¾- —
tanks, same basis . . . . . lb. .12 - —
**Didecyl phthalate**, dms. c.l. works. lb. .28½- —
dms., t.c.l., same basis lb. .30 - —
tankcars, tanktrucks 2,000 gals., lb. .26 - —
tanktrucks, 1,000-1,999 gals, same basis lb. .26½- —
**Dieldrin**, dms., c.l., dlvd . . . . . lb. 1.85 - —
dms., t.c.l., dlvd . . . . . lb 1.90 - —
**Diethanolamine**, dms., c.l., dlvd E lb. .27 - —
dms., t.c.l., same basis . . . . . lb. .28½- —
tanks, same basis . . . . . lb. .24½- —
**Diethanolamine lauryl sulfate**, dms., c.l., frt. alld lb. .27½- —
dms., t.t.l., frt. alld . . . . . lb. .28½- —
tanks, frt. alld . . . . . lb. .26½- —
**Diethyl barbituric acid** (see Barbital).
**Diethyl carbonate**, dms. c.l., f.o.b. works lb. .47½- —
dms. t.c.l. same basis . . . . . lb. .48½- —
tanks, same basis . . . . . lb. .45 - —
**Diethyl ethanolamines**, dms. c.l., dlvd lb .69½- —
dms., t.c.l., dlvd. . . . . lb. .71 - —
tanks, dlvd . . . . . lb. .67 - —
**Diethyl oxalate**. dms. c.l. f.o.b. works lb .42½- —
dms., t.c.l. same basis . . . . . lb. .43½- —
tanks, same basis . . . . . lb. .40 - —
**Diethyl phthalate**, dms. c.l., dlvd. lb .27½- —
dms., t.c.l., dlvd . . . . . lb. .29 - —
tanktrucks, 1,000-1,999 gals., same basis lb. .26½- —
tankcars, tanktrucks, 2,000 lb lots, same basis lb. .26 - —
**Diethyl sulfate** dms. c.l. works lb. .19½- —
dms., t.c.l., works . . . . . lb. .20¼- —
tanks, works . . . . . lb. .17½- —
**Diethyl thiourea**, dms., c.l., t.l., works lb. .58 - —
dms., t.c.l., same basis . . . . . lb. .59 - —
**Diethyl toluamide**, 90-95% meta isomer dms., c.l., t.l. works lb 2.30 - —
5-44 dm lots, works . . . . . lb 2.35 - —
1-4 dm lots, works . . . . . lb 2.40 - —
**N,N-Diethyl-m-toluidine** tech., liq., tanks, frt alld lb. .83 - —
**Diethylamine** dms. c.l. dlvd. E lb. .52 - —
dms., t.c.l. same basis . . . . . lb. .53½- —
tanks, same basis . . . . . lb. .49½- —
**N,N-Diethylaniline** dms., c.l., frt. alld lb. .57 - —
dms., t.c.l., same basis . . . . . lb. .58 - —
tanks, same basis . . . . . lb. .55 - —
**Diethylbenzene**, dms. t.l., frt. alld, lb. .16½- —
**Di-2-ethylhexyl adipate** (see Dioctyl adipate).
**Di-2-ethylhexyl phthalate** (see Dioctyl phthalate)
**Diethylene glycol**, dms. c.l. dlvd. E lb. .17¾- —
dms., t.c.l., same basis . . . . . lb. .19¼- —
tanks, same basis . . . . . lb. .15¼- —
**Diethylene glycol diethyl ether**, dms., c.l., works lb. .51½- —
dms., t.c.l., works . . . . . lb. .52¼- —
**Diethylene glycol monobutyl ether**, c.l. dms., works lb. .30¾- —
dms., t.c.l., works . . . . . lb. .32¼- —
tanks, dlvd. E . . . . . lb. .28¼- —
**Diethylene glycol monobutyl ether acetate**, dms., c.l., works lb. .30¾- —
dms., t.c.l., works . . . . . lb. .31½- —
tanks, dlvd. E . . . . . lb. .28¾- —
**Diethylene glycol monoethyl ether**, dms., c.l., dlvd lb. .22½- —
dms., t.c.l., dlvd . . . . . lb. .24 - —
tanks, dlvd. E . . . . . lb. .20 - —
**Diethylene glycol monoethyl ether acetate** dms., c.l., works lb. .27¼- —
dms., t.c.l., works . . . . . lb. .28 - —
tanks, works . . . . . lb. .25¼- —
**Diethylene glycol monomethyl ether**, dms., c.l., dlvd lb. .21 - —
dms., t.c.l., dlvd . . . . . lb. .22½- —
tanks, dlvd. E . . . . . lb. .18½- —
**Diethylenetriamine**, dms. c.l. dlvd. E lb. .44 - —
dms., t.c.l. dlvd E . . . . . lb. .45½- —
tanks, dlvd. E . . . . . lb. .41½- —
**Diethylstilbestrol USP bots**, 10-kilo lots kilo 100.00 147.50
bots., 1-kilo lot kilo 110.00 152.50
**Digitalis leaves**, USP, dom., dms lb. 1.25 - —
**Digitoxin**, USP, bots . . . . . gram. 4.20 - —
**Diglycol laurate** dms . . . . . lb .32¾- .34
**Diglycol stearate** dms. ton lots lb. 26 - .28
**Diglycolic acid** bgs. c.l. t.l. works. lb. .15½- —
bgs. t.c.l., works . . . . . lb. .16 - —
**Dihexyl sebacate** dms. c.l. works. lb. .66 - —
dms., t.c.l., works . . . . . lb. .67 - —
tanks, works . . . . . lb. .64 - —
**Dihydrazine sulfate** dms. works lb 1.10 - 1.25
**Dihydrostreptomycin hydrochloride**. bulk gram .04 - .041
**Dihydrostreptomycin sulfate** bulk. gram .04 - .041
**1,2-Dihydroxy anthraquinone**, dms., works lb 3.45 - —
**2,2-Dihydroxy-5-5-dichloro-diphenyl-methane** pure. dms lb 2.55 - —
tech., dms . 20,000 lbs. or more lb. 1.11 - —
dms., 1,050 lbs. to 20,000 lbs. lb 1.13 - —
dms., 150 lbs. to 1,050 lbs lb. 1.15 - —
**Di-isobutyl ketone** dms. c.l. dlvd. lb. .17 - —
dms., t.c.l. dlvd . . . . . lb. .18½- —
tanks, dlvd. . . . . lb. .14½- —
**Di-isobutyl phthalate**, dms., c.l., dlvd. E lb. .31½- —
dms., t.c.l. same basis . . . . lb. .32½- —
tanks same basis . . . . . lb. .29 - —
**Di-isobutylene** dms. c.l. dlvd. E lb. .10 - —
dms., t.c.l., dlvd E . . . . . lb. .11½- —
tanks, dlvd E . . . . . lb. .08 - —
**Di-iso-octyl phthalate**, dms., c.l., dlvd lb. .27½- —
dms., t.c.l. same basis lb. .29 - —
tanktrucks, 1,000-1,999 gals., dlvd. lb. .25½- —
tankcars, tanktrucks, 2,000 gals., dlvd lb. .25 - —
**Di-iso-octyl sebacate**, dms., c.l., works lb. .62 - —
dms., t.c.l., works . . . . . lb. .62½- .63
tanks, works . . . . . lb. .60 - —
**Di-isopropanolamine** dms. c.l. dlvd. lb. .23¼- —
dms., t.c.l. same basis . . . . . lb. .24¾- —
tanks, same basis . . . . . lb. .26¾- —
**Di-isopropylamine** dms. c.l., dlvd. E of Rockies lb. .50½- —
dms., t.c.l., same basis lb. .52 - —
tanks, same basis . . . . . lb. .48 - —
**Dillweed oil**, dom., bots., dms lb. 3.00 - 4.00
**Dimethyl anthranilate**, ens . . lb. 4.15 - —
**Dimethyl dichlorovinyl phosphate**, 55 gal. dms., dlvd . . lb. 3.50 - —
**Dimethyl ethanolamines**, anhyd., dms. c.l. dlvd lb 1.225 - —
dms., t.c.l. dlvd. . . . . lb 1.275 - —
tanks, dlvd. . . . . lb. 1.20 - —
70% dms. c.l. dlvd., 100% basis, contained amines lb. 69½- —
dms., t.c.l., dlvd. 100% basis lb. 69½- —
tanks, dlvd. 100% basis . . . lb. 66 - —
**Dimethyl hydroquinone** dms. . . lb. 1.90 2.20
**Dimethyl phthalate** dms., c.l., works lb. .27½- —
dms., t.c.l., works . . . . . lb. .29 - —
tanktrucks, 1,000-1,999 gals., same basis lb. .25½- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .25 - —
**Dimethyl sebacate** dms. c.l. works. lb. 1.31 - —
dms., t.c.l., works . . . . . lb 1.30 - —
tanks, works . . . . . lb 1.28 - —
**Dimethyl sulfate**, ref. dms., c.l., works lb. .17½- —
ref. dms. t.c.l., works . . . . lb. .18½- —
tanks, works . . . . . lb. .16½- —
**Dimethyl sulfide**. dms. c.l., works. lb. .16½- —
dms., t.c.l. works . . . . . lb. .17 - —
tanks, works . . . . . lb. .15 - —
**Dimethylamine**, 25% soln., dms., c.l., frt. equald. 100% basis lb. .38 - —
dms., t.c.l., frt. equald, 100% basis lb. .38½- —
tanks frt equald 100% basis lb. .28 - —
40% soln., dms., c.l., frt. equald, 100% basis lb. .35 - —
dms., t.c.l. frt. equald, 100% basis lb. .35½- —
tanks, frt. equald 100% basis, lb. .28 - —
**N,N-Dimethylaniline** dms. c.l., frt. alld lb. .28 - —
dms., t.c.l., same basis . . . . lb. .29 - —
tanks, same basis . . . . . lb. .26 - —
**N-N-Dimethylformamide**, dms., c.l., t.l., works lb. .32½- —
dms., t.c.l., works . . . . . lb. .33 - .34
tanks, works . . . . . lb. .30 - —
**2,4-Dinitroaniline**. dms. frt alld lb. 75 - —
**Dinitroaniline orange toner**, CP. bbls. dlvd E of Rockies lb 1.56 - —
Dinitroaniline orange toner prices 1c higher W of Rockies
**m-Dinitrobenzene**, 89°C., dms lb. .26 - —
**2,4-Dinitrochlorobenzene** crystallizing at 46½°C. dms. c.l. frt. alld. E lb. .17¼- —
dms., t.c.l., frt. alld. E . . . lb. .17¾- —
tanks, frt. alld. E . . . . . lb. .17 - —
**2,4-Dinitrophenol**, bbls . . . . . lb. .41 - —
**2,4-Dinitrotoluene**, oily dms. . . . lb. .11 - —
**Refd.**, 63°C., dms . . . . . lb. .23 - —
**Dioctyl adipate** dms. c.l., works. lb. .42½- —
dms., t.c.l. works . . . . . lb. .43½- —
tanks, works . . . . . lb. .40 - —
**Dioctyl phthalate**, dms., c.l., frt. alld lb. .27½- —
dms. t.c.l. frt alld . . . . . lb. .29 - —
tanktrucks, 1,000-1,999 gals., same basis lb. .25½- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .25 - —
**Dioctyl sebacate** dms. c.l., works. lb. .61¼- —
dms., t.c.l. works . . . . . lb. .62¼- —
tanks, works, dlvd. . . . . lb. .59¼- —
**1,4-Dioxane**, dms., c.l. works . . . lb. .30 - —
dms., t.c.l., works . . . . . lb. .30¾- —
tanks, works . . . . . lb. .28 - —
**Dipentaerythritol**, bgs., c.l., t.l., dlvd. E lb. .40 - —
bgs., t.c.l., t.t.l., dlvd E . . . . lb. .41 - —
**Dipentene**, dest.-dist., dms., c.l., works gal. .59 - —
dms. t.c.l., works . . . . . gal. .63 - —
dms., t.c.l., ex whse. . . . . gal. .79 - —
tankcars, works . . . . . gal. .42 - —
**Steam dist.**, dms., c.l., works, South gal. .72 - —
**Dipentene, steam**, dms., t.c.l., dlvd, New York gal. .91 - —
tanks, works, South . . . . . gal. .55 - —
**Dip oil** (see Tar acid oil)
**Diphenolic acid**, 1,000-lb. or more, bgs., works . . . . . lb. .75 - —
**Diphenolic polyether acids**, 1,000-lb. or more, bgs., works lb. 1.00 - —
**Diphenyl**, bgs. c.l., t.l., works lb. .17¼- —
bgs. t.c.l. works . . . . . lb. .19 - —
tanks, works . . . . . lb. .16 - —
**Diphenyl oxide** perfume grade ens. lb. .55 - .70
**Diphenyl phthalate** dms. c.l., works. lb. 51¾- —
dms., t.c.l. works . . . . . lb. .53¾- —
**Diphenylamine**, refd., flake, bgs., c.l., works, frt. equald lb. .31 - —
bgs., t.c.l., same basis . . . lb. .33 - —
Refd., fused, tanks, same basis lb. .28 - —
Refd diphenylamine in dms ½c. per lb higher
**Diphenylguanidine** bgs., dms., ton, lots, frt. alld lb. 49 - —
bgs. smaller lots, frt. alld. . . lb. 50 - —
**Diphenylhydantoin-sodium** USP dms. lb 5.00 5.60
**Dipropylene glycol**, dms. c.l., frt. alld. lb. .17 - —
dms., t.c.l., frt. alld . . . . . lb. .18½- —
tanks, frt. alld . . . . . lb. .14¼- —
**Dipropylene glycol methyl ether**, dms., c.l., dlvd E lb. .20 - —
dms., t.c.l., same basis . . . . lb. .21½- —
tanks, same basis . . . . . lb. .18½- —
**Dithiodibenzoic acid** dms., 1,000-lb. lots, works lb 1.45 - —
**Di-o-tolylguanidine**, dms., ton lots, frt. alld lb. 69 - —
dms., smaller lots, frt alld. . . lb 70 - —
**Di-o-tolylthiourea**, tech., solid, dms., c.l., t.l., frt. alld lb. .55 - —
**Divinylbenzene**, 20-25%, dms., c.l., works, frt equald lb. 20 - —
dms., t.c.l., same basis . . . lb. 21 - —
tanks, same basis . . . . . lb. .19 - —
50-60%, dms., c.l., works, 100% basis lb. 1.00 - —
dms., t.c.l., works, 100% basis lb 1.05 - —
**Dodecenyl succinic anhydride**, dms., c.l., t.l., dlvd. E lb. .75 - —
dms., t.c.l., t.t.l., same basis . lb. .76 - —
**Dodecylbenzene**, dms., c.l. f.o.b., works, frt equald lb. .134 - —
dms., t.c.l., same basis . . . . lb. .144 - —
tanks, same basis . . . . . lb. .11 - —
**Dodecylphenol** c.l., frt alld. . . . lb. .22 - —
dms., t.c.l. same basis . . . . . lb. .23 - —
tanks same basis . . . . . lb. .19½- —
Dodecylphenol prices on shipments to Western States are 2c. per pound higher
**Dyes**, coaltar, certified colors for food, drugs and cosmetics, 500-lb and 1-lb lots, dlvd:
Blue, FD&C, No 1 . . . . . lb 15.65 -17.60
No. 2 . . . . . lb 15.65 -17.60
Green, FD&C, No 1 . . . . . lb 15.65 -17.60
No. 2 . . . . . lb 19.60 -22.85
No. 3 . . . . . lb 31.30 -35.90
Red, FD&C, No. 1 . . . . . lb. 5.90 - 7.85
No. 2 . . . . . lb 3.30 4.10
No. 3 . . . . . lb 19.60 -22.85
No. 4 . . . . . lb 5.55 7.50
Violet, FD&C, No. 1 . . . . . lb.15.65 -17.60
Yellow, FD&C, No. 1 . . . . . lb. 9.15 -11.05
No. 5 . . . . . lb 3.30 4.10
No. 6 . . . . . lb 3.30 4.10
**Dyes**, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb lots, dlvd:—
Black, D&C, No. 1 . . . . . lb 10.50 -10.95
Brown, D&C, No. 1 . . . . . lb 15.65 -16.10
Green, D&C, No. 5 . . . . . lb 15.65 -16.10
No. 6 . . . . . lb 15.65 -16.10
No. 7 . . . . . lb 14.35 -14.80
Orange, D&C, No. 3 . . . . . lb 10.50 -10.95
No. 4 . . . . . lb 19.60 -20.05
No. 5 . . . . . lb 3.80 4.25
Red, D&C, No 17 . . . . . lb 10.50 -10.95
No. 18 . . . . . lb 23.60 -24.00
No. 19 . . . . . lb 15.00 -15.45
No. 21 . . . . . lb 3.90 4.35
No. 22 . . . . . lb 10.50 -10.95
No. 28 . . . . . lb 24.15 -24.65
No. 33 . . . . . lb 17.00 -17.45
Violet, D&C, No. 2 . . . . . lb 15.65 -16.10
Yellow D&C, No. 7 . . . . . lb 10.50 -10.95
No. 8 . . . . . lb 10.50 -10.95
No. 10 . . . . . lb 13.05 -13.50
No. 11 . . . . . lb 13.05 -13.50
**Dyes**, coaltar, certified colors for drugs and cosmetics, external use, 500-lb and 1-lb lots dlvd:—
Blue, Ext., D&C, No. 1 . . . . . lb.15.65 -16.10
Green, Ext., D&C, No. 1 . . . . . lb.15.65 -16.10
Red, Ext., D&C, No. 2 . . . . . lb.13.65 -13.50
Yellow, Ext., D&C, No. 1 . . . . lb.10.50 -10.95
**Dyes**, coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract dlvd No.
11110 Brilliant scarlet BN . . . . lb. 1.79 - —
13390 Fast blue SR . . . . . lb. 1.43 - —
14025 Yellow 2G . . . . . lb. 1.26 - —
14030 Orange R, extra, conc . . lb. 1.64 - —
14645 Chrome black T . . . . . lb. .77 - —
14720 Rubine XX, conc . . . . . lb. 1.59 - —
15510 Orange Y, extra conc. . . lb. .83 - —
15575 Orange RR . . . . . lb. .99 - —
15620 Fast Red A, conc . . . . lb. 1.61 - —
15705 Chrome blue black R, conc. lb. 1.12 - —
16150 Scarlet 2RL . . . . . lb. 1.22 - —
16255 Brilliant scarlet 3RN, conc. lb. 1.26 - —
16230 Fast light, orange 2G . . . lb. 1.39 - —
17590 Brown PG . . . . . lb. 3.00 - —
18050 Phloxine 2G . . . . . lb 1.05 - —
18055 Fuchsine 6B . . . . . lb 1.55 - —
18965 Fast Yellow 2G . . . . . lb 2.32 - —
19140 Yellow XX . . . . . lb. 2.48 - —
19555 Yellow NN, conc . . . . . lb 3.67 - —
20170 Brown Y . . . . . lb. 1.53 - —
20470 Blue black, extra, conc . lb. 1.44 - —
21010 Brown RX conc . . . . . lb. 1.35 - —
22240 Scarlet B . . . . . lb. 2.81 - —
22310 Red FC . . . . . lb. 1.57 - —
22311 Brown MCW . . . . . lb. 1.47 - —
22590 Diazo black BHD . . . . . lb 93 - —
22610 Blue 2B extra conc. . . . lb 1.53 - —
23500 Red, 4BX conc . . . . . lb 1.80 - —
24410 Sky blue FF extra conc lb 1.95 - —
24893 Brilliant yellow, conc . . lb. 3.27 - —
26360 Navy blue 3R, conc . . . . lb. 1.84 - —
26695 Black F, conc . . . . . lb. 2.30 - —
26900 Milling Red 3R conc . . . lb 1.91 - —
27075 Neutral black 2B conc lb 2.75 - —
27720 Gray L . . . . . lb. 2.18 - —
29185 Fast scarlet 4BNC . . . . lb. 2.23 - —
30015 Diazo black VJ conc . . lb 2.48 - —
30045 Yellow brown K extra lb 1.26 - —
**Dyes**, coaltar for general use in cloth dyeing (numbers are those of the Colour index scale or prototype), contract. dlvd. No.
30235 Black EB, 200% . . . . . lb. 1.33 - —
30295 Green BY, conc . . . . . lb. 1.07 - —
35660 Brown B . . . . . lb. 2.89 - —
37565 Naphthol SWF . . . . . lb. 1.85 - —
40000 Yellow 2G . . . . . lb. 1.44 - —
41000 Yellow OX . . . . . lb. 2.45 - —
42000 Green V, crystals . . . . . lb. 2.73 - —
42040 Brilliant green G crystals lb. 3.62 - —
42090 Blue EG . . . . . lb. 1.85 - —
42100 Milling green 6B conc. . lb 4.78 - —
42640 Violet 4BXN . . . . . lb. 2.43 - —
43830 Brilliant blue, BBG . . . lb. 2.44 - —
44045 Blue B, extra conc. . . . lb 3.61 - —
45170 Red BX . . . . . lb 4.76 - —
50415 Nigrosine SSJ . . . . . lb 1.03 - —
52015 Blue GXX . . . . . lb. 2.33 - —
53185 Black GXCF, conc. . . . lb. .38 - —
58005 Alizarin red SC . . . . . lb. 3.64 - —
59700 Golden orange GFD single paste lb. 2.70 - —
59710 Flaming orange 6RD double powder lb. 4.90 - —
59800 Dark blue BO, single paste lb. 2.28 - —
59825 Jade green NC supra, double paste lb 1.50 - —
61570 Alizarin green CG, extra lb. 3.81 - —
63010 Alizarin blue SAPG . . . . lb. 3.90 - —
63615 Alizarin blue black B . . . lb. 3.26 - —
69825 Blue BLFD double paste lb 2.82 - —
70800 Brown BR single paste . . lb. 2.03 - —
**Dyes**, coaltar, oil-soluble, 100-lb drums dlvd. No.
12140 Oil scarlet BL . . . . . lb. 1.87 - —
12055 Oil orange 7078 V . . . . . lb. 1.38 - —
26120 Oil red N 1700 . . . . . lb. 1.94 - —
42535B Methyl violet base . . . . lb. 1.88 - —
44045B Victoria blue base . . . . lb. 4.06 - —
50415B Oil black 8603 . . . . . lb. .80 - —
61565 Alizarin cyanine green base. lb 6.13 - —
Spirit black RB . . . . . lb. 3.89 - —
Spirit brown GN . . . . . lb 5.30 - —
Spirit orange R conc. . . . lb 5.87 - —
Spirit red B conc . . . . . lb 6.41 - —
Pr. 517 Spirit yellow 2R conc lb. 4.62 - —
Pr. 554 Spirit blue THN . . . . . lb. 5.06 - —

## E

**Echinacea root**, bls . . . . . lb. 1.25 - —
**Elm bark**, grinding, bls. . . . . lb .30 - .32
Powd., bbls., bxs . . . . . lb. .50 - .55
Select, bundles . . . . . lb 75 - —
**Emetine hydrochloride**, USP bots oz.48.40 - —
**Endrin**, tech., dms., 100-lbs. or more, 100% basis, dlvd. . . . lb. 2.70 - —
**Eosin red toner**, bbls., works lb. 1.85 - —
**Ephedrine**, syn., USP, anhyd., bots. 100-oz. lots oz. .98 - 1.00
hydrous bots 100-oz. lots oz. .92 - —
**Ephedrine hydrochloride**, NF, dms., 100-oz., f.o.b. works oz. .72 - —
**Ephedrine sulfate**, USP, cryst., dms., 100-oz., f.o.b. works oz. .73 - —
USP, powd., dms., 100-oz., same basis oz. .73 - —
**Epichlorohydrin**, dms., c.l., dlvd lb. .29½- —
dms., t.c.l., dlvd . . . . . lb. .31 - —
tanks, dlvd. . . . . lb. .27 - —
**Epsom salt** (see Magnesium sulfate).
**1-Epinephrine base**, syn. USP, bots., 100 gram lots gram. .58 - —
**Erigeron oil** ens. . . . . lb 11.00 - —
**Ergot**, NF, dms., tin-lined . . . . . lb. 1.00 - 1.25
**Eserine salicylate**, bots . . . . . oz.44.00 - —
**Eserine sulfate**, bots . . . . . oz.86.00 - —
**Esser gum, gum-rosin type**, dms., c.l., dlvd., Ill., Md., Ky., E. States, Minneapolis N. C., Ohio, St. Louis, St. Paul, Va., W. Va. lb. .18½- —
Wood-rosin type, dms., c.l., same basis lb. .18½- —
**Ether** (see specific product)
**Ethyl acetate** nat. ferment 85-88%, dms. c.l. dlvd lb. .15 - —
dms., t.c.l., dlvd . . . . . lb. .16½- —
tanks dlvd . . . . . lb. .12½- —
95-98%, dms., c.l., dlvd . . . . lb. .15¼- —
dms., t.c.l. dlvd . . . . . lb. .16¾- —
tanks, dlvd. . . . . lb. .12¾- —
99% dms., c.l., dlvd. . . . . lb. .15½- —
dms., t.c.l., dlvd . . . . . lb. .17 - —
tanks, dlvd. . . . . lb. .13 - —
Syn., 85-88%, dms., c.l., dlvd . lb. .15 - —
dms., t.c.l., dlvd . . . . . lb. .16½- —
tanks, dlvd . . . . . lb. .12½- —
95-98% dms., c.l., dlvd . . . . . lb. .15¼- —
dms., t.c.l., dlvd . . . . . lb. .16¾- —
tanks, dlvd . . . . . lb. .12¾- —
99% dms., c.l., dlvd. . . . . lb. .15½- —
dms., t.c.l., dlvd. . . . . lb. .17 - —
tanks, dlvd. . . . . lb. .13 - —
**Ethyl acetoacetate**, dms., c.l., dlvd. lb. .58½- —
dms., t.c.l., dlvd. . . . . lb. .60 - —
tanks, dlvd. . . . . in. .56 - —
**Ethyl acrylate** dms., c.l., t.l., dlvd lb. .36 - —
dms., t.t.l., dlvd. . . . . lb. .37 - —
tanks, dlvd. . . . . lb. .34 - —
**Ethyl alcohol**, 190 pf., USP, tax paid dms., c.l., dlvd. E. of Rockies gal.20.63 —
dms., t.c.l., same basis gal.20.68 -20.74
**Ethyl alcohol**, 190 pf., USP, tax-free, dms., c.l., dlvd E of Rockies gal. .68 - —
dms., t.c.l same basis gal. .73 - .79
tanks, same basis gal. .52 - —
**Ethyl alcohol**, absolute 200 pf., tax paid, dms. dlvd. E of Rockies gal.21.75 - —
dms., t.c.l., same basis gal.21.80 -21.86
tanks, same basis . . . gal.21.59 - —
**Ethyl alcohol**, denatured (see Denatured alcohol, ethyl).
**Ethyl aminobenzoate** USP (see Benzocaine).
**Ethyl amyl ketone** dms., c.l., dlvd. lb. .20 - —
dms., t.c.l. same basis . . . . . lb. .21½- —
tanks same basis . . . . . lb. .17½- —
**Ethyl benzoate**, bots . . . . . lb. .75 - 1.00
**Ethyl bromide** tech., 98%, dms., c.l., frt. alld. E lb. .43 - —
dms., t.c.l., frt. alld. E . . lb. .45 - —
tanks, frt. alld. E. . . . . lb. .41 - —
**Ethyl butyl ketone**, dms., c.l., t.l., works lb. .36 - —
dms., t.c.l., t.t.l., works . . lb. .36¾- —
tanks, works . . . . . lb. .34 - —
**Ethyl butyrate**, dms., works . . lb. .85 - 1.00
**Ethyl carbamate** (see Urethane).
**Ethyl cellulose**, vis. 7 cps., bgs., 5,000-lb lots or more, frt. alld. E lb. 73 - —
bgs. smaller lots, frt alld E lb 75 - —
Vis. 10, 20, 50, 100, 150 cps., bgs., 5,000-lb. lots or more, frt. alld. E lb. .68 - —
bgs., smaller lots, frt. alld. E. lb. .70 - —
**Ethyl chloride**, tech., cyls., works. lb. .20 - .22
dms., works . . . . . lb. .18 - .20
tanks, works . . . . . lb. .10 - —

| | | | |
|---|---|---|---|
| Ethyl cinnamate, cns. | lb. | 3.35 | - 3.50 |
| Ethyl ethanolamines, mixed, dms., c.l., dlvd. E | lb. | .43½ | — |
| dms., t.c.l., dlvd. E | lb. | .44½ | — |
| tanks, dlvd. E. | lb. | .41½ | — |
| Ethyl ether, absolute, ACS, dms. | lb. | .27 | — |
| Anesthesia, USP, dealers, 1-lb. cns. | lb. | 1.01 | — |
| ½-lb. cns. | lb | 1.09 | — |
| ¼-lb. cns. | lb | 1.21 | — |
| Indust., dms., c.l., dlvd. | lb. | .13½ | — |
| dms., t.c.l., dlvd. E. | lb. | .15 | — |
| tanks, dlvd. E. | lb. | .11 | — |
| 2-Ethyl hexoic acid, dms., c.l., t.l., dlvd. E | lb. | .37 | — |
| dms., t.c.l., t.t.l., dlvd. E. | lb. | .33½ | — |
| tanks, dlvd. E | lb. | .34½ | — |
| 2-Ethyl hexoic acid, 1c. higher W. of Rockies. | | | |
| 2-Ethylhexyl acrylate, c.l. or t.l., straight or mixed, frt. alld. E | lb. | .42½ | — |
| dms., t.t.l., same basis | lb. | .43½ | — |
| tanks, same basis | lb. | .40 | — |
| Prices of 2-ethylhexyl acrylate are 1½c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash. | | | |
| 2-Ethylhexyl alcohol, dms. c.l. dlvd. | lb. | .23½ | — |
| dms., t.c.l. dlvd. | lb. | .25½ | — |
| tanks, dlvd. | lb. | .21½ | — |
| Ethyl iodide, cbys., works | lb. | 3.30 | — |
| Ethyl methacrylate, dms., c.l., frt. equald | lb. | .52 | — |
| dms., t.t.l. frt. equald. | lb. | .52½ | — |
| tanks, frt. equald. | lb. | .50 | — |
| Ethyl morphine hydrochloride, USP, bots | oz | 11.83 | — |
| Ethyl oenanthate, dms. | lb. | 1.05 | - 1.30 |
| Ethyl oxalate (see Diethyl oxalate). | | | |
| Ethyl silicate, dist. (see Tetraethyl orthosilicate). | | | |
| Ethyl silicate, 40% available, $SiO_2$, dms., c.l., dlvd | lb. | .44½ | — |
| dms., t.c.l. dlvd. | lb. | .46 | — |
| tanks, dlvd | lb. | .42 | — |
| N-Ethyl-a-naphthylamine, dms., works | lb | 1.02 | — |
| N-Ethyl-m-toluidine, tech., liq., tanks, frt. alld | lb. | .83 | — |
| N-Ethyl-o-toluidide, bbls. | lb. | .88 | — |
| Ethylamine (see Mono-, Di-, or Tri-). | | | |
| N-Ethylaniline, dms., c.l., frt. alld. | lb. | .57 | — |
| dms., t.c.l., frt. alld. | lb. | .58 | — |
| tanks, frt. alld. | lb. | .55 | — |
| Ethylbenzene 99% dms., c.l. or t.l., frt. equald | lb. | .13 | — |
| dms., t.c.l., same basis | lb. | .17 | — |
| tanks, same basis | lb. | .12½ | — |
| 2-Ethylbutyl alcohol, dms., c.l., works | lb. | .30 | — |
| dms., t.c.l., works | lb. | .30¾ | — |
| tanks, works | lb. | .28 | — |
| Ethylene, contract, ref'y, gate | lb. | .0475 | .0525 |
| Ethylene dibromide, dms., c.l., frt. equald | lb. | .30½ | — |
| dms., t.c.l. frt. equald. | lb. | .31½ | — |
| tanks, frt. equald | lb. | .28½ | — |
| Ethylene dichloride, dms., c.l., dlvd. | lb. | .11½ | — |
| dms., t.c.l., same basis | lb. | .13 | — |
| tanks, same basis | lb. | .09 | — |
| Ethylene dichloride prices W. of Rockies, 1c. per lb. higher. | | | |
| Ethylene glycol, indust., dms., c.l., dlvd. E | lb. | .16 | — |
| dms., t.c.l., same basis | lb. | .17½ | — |
| tanks, same basis | lb. | .13½ | — |
| Ethylene glycol monobutyl ether, dms., c.l., dlvd. E | lb. | .22 | — |
| dms., t.c.l., dlvd. E | lb. | .23½ | — |
| tanks, dlvd E. | lb. | .19½ | — |
| Ethylene glycol monoethyl ether, dms., c.l., dlvd. E | lb. | .21 | — |
| dms., t.c.l., dlvd. E | lb. | .22½ | — |
| tanks, dlvd E | lb. | .18½ | — |
| Ethylene glycol monoethyl ether acetate, dms., c.l., dlvd E | lb. | .19½ | — |
| dms., t.c.l., dlvd. E | lb. | .20½ | — |
| tanks, dlvd., E. | lb. | .17 | — |
| Ethylene glycol monomethyl ether, dms., c.l., dlvd. E | lb. | .21 | — |
| dms., t.c.l., dlvd. E | lb. | .22½ | — |
| tanks, dlvd. E. | lb. | .18½ | — |
| Ethylene glycol monomethyl ether acetate, dms., c.l., dlvd. E | lb. | .29 | — |
| dms., t.c.l., dlvd. E. | lb. | .29¾ | — |
| tanks, dlvd E. | lb. | .27 | — |
| Ethylene glycol monostearate, triple pressed, dms | lb. | .33 | - .35 |
| Ethylene oxide, dms. c.l., dlvd E. | lb. | .21½ | — |
| dms., t.c.l., dlvd. E. | lb. | .24½ | — |
| tanks, dlvd. E. | lb. | .15½ | — |
| Ethylene trichloride (see Trichloroethylene) | | | |
| Ethylenediamine, 85-88%, dms., c.l., dlvd. E., 100% basis | lb. | .42 | — |
| dms., t.c.l., dlvd. E., 100% basis. | lb. | .43 | — |
| tanks, dlvd. E., 100% basis | lb. | .40 | — |
| Ethylvanillin, 100-lb. fib. dms., 500-lb. lots and over | lb. | 6.75 | — |
| Eucalyptol, USP, cns., dms | lb. | .85 | - 1.40 |
| Eucalyptus oil, NF, rectified, 70-75%, dms. | lb. | .50 | - .58 |
| NF, rectified, 80-85%, dms. | lb. | .58 | - .85 |
| Eugenol, tech., dms. | lb. | 1.45 | — |
| USP, dms. | lb. | 2.10 | - 2.80 |
| Euphorbia herb, bls. | lb. | .12 | - .15 |

## F

| | | | |
|---|---|---|---|
| F salt, paste, tech., dms., works | lb | 2.30 | — |
| Feldspar, 140-200 mesh, bulk, c.l., works | ton | 19.50 | — |
| Feldspar in bags $3 per ton higher. | | | |
| Fennel oil, sweet, USP, cns. | lb. | 2.25 | - 2.70 |
| Fennel seed, Argentine, bgs. | lb. | .14 | — |
| French, light, bgs. | lb. | .20 | — |
| Indian, light, bgs. | lb. | .17 | — |
| Rumanian, bgs. | lb. | .14 | — |
| Yugoslav, light, bgs. | lb. | .16½ | — |
| Fenugreek seed, Moroccan, bgs | lb. | .07½ | — |
| Ferric chloride, anhyd., tech., dms., c.l., works | 100 lbs. | 7.50 | — |
| dms. t.c.l., works | 100 lbs. | 8.50 | — |
| Indust., cryst., bnls., c.l., works. | 100 lbs. | 5.25 | - 6.75 |
| Ferric chloride, indust., cryst., bbls. t.c.l., works | 100 lbs. | 5.75 | - 7.25 |
| 42°Be., photo grade, cbys., c.l., works | 100 lbs. | 7.25 | - 8.25 |
| sewage grade, tanks, frt. equald, 100% basis | 100 lbs. | 4.00 | — |
| USP, cryst., dms., t.l., works | lb. | .08½ | — |
| Ferric citrate, gran., dms. | lb. | .86 | — |
| Ferric hypophosphite, NF, dms | lb. | 3.45 | — |
| Ferric naphthenate, liq., 6% Fe, dms., frt. alld | lb. | .56¼ | — |
| Ferric oxalate, tech., gran., 50-lb. dm. f.o.b. works E. | lb. | .89 | — |
| Ferric oxides (see iron oxides). | | | |
| Ferric phosphate, NF, solubie gran. pearls, cs | lb. | .72 | - .98 |
| Ferric pyrophosphate, NF, VII, soluble, gran., pearls, dms. | lb. | .79 | — |
| Ferric resinate, 6¾% Fe., dms., ton lots, frt. alld | lb. | .40¼ | — |
| Ferric stearate, dms., c.l., frt. alld. | lb. | .39 | — |
| dms., t.c.l., frt. alld. | lb. | .40 | - .44 |
| Ferric sulfate, partly hydrated, bgs., c.l. works | ton | 35.25 | — |
| bgs., t.c.l., works | ton | 36.25 | - 42.25 |
| bulk, c.l., works | ton | 33.25 | — |
| Ferric-ammonium citrate, brown, pearls, NF, gran., dms | lb. | .63 | - .68 |
| Green, pearls, USP XII, gran., dms | lb. | .66 | - .69 |
| Ferric-ammonium oxalate, fine gran., dms | lb. | .27½ | - .29½ |
| Ferric-potassium oxalate, fine gran., dms | lb. | .32½ | - .34½ |
| Ferric-sodium oxalate, fine gran., dms | lb. | .27½ | - .29½ |
| Ferrous gluconate, USP, 200-lb. dm., frt. equald | lb. | .96 | — |
| Ferrous sulfate, gran., bgs., c.l., works | ton | 34.50 | — |
| bgs., t.c.l., dlvd. Metropolitan area, 100 lbs | | 3.35 | - 4.25 |
| bbls., c.l., works | ton | 40.00 | — |
| bulk, c.l., works | ton | 27.00 | — |
| USP, cryst., bbls., dms. | lb | .09½ | - .10 |
| Fir balsam, Canada, bbls. | gal. | 32.00 | - 35.00 |
| Oregon, bbls. | gal. | 3.40 | - 4.64 |
| Fir oil, Canada, cns. | lb. | 1.75 | - 2.50 |
| Fish oil, refd., alkali, dms. | lb. | .1300 | - .1350 |
| Kettle-bodied, dms. | lb. | .1530 | - .1580 |
| Light-pressed, dms. | lb. | .1150 | - .1200 |
| tanks | lb. | .10 | — |
| Fishliver oil, nat., high potency, 100,000 to 1,500,000 A units per gram, dms. 1,000,000 units. | | .12 | — |
| Fishmeal, dom., menhaden, 60% protein grd., bgs., Atlantic and Gulf coasts | ton | 105.00 | — |
| Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., Atlantic and Gulf coasts. | ton | 101.00 | — |
| Fleaseed (see Psyllium seed). | | | |
| Folic acid, USP, bots., fib. dms., kilo lots or more, gram | | .30 | - .44 |
| 10% feed grade, fib. dms., 3 kilos or more, kilo | | 30.00 | - 44.00 |
| Formaldehyde, 37%, (inhibited 7 to 8% methanol), USP, dms., c.l., dlvd | lb. | .0670 | — |
| tanks, dlvd. | lb. | .0403 | — |
| Formaldehyde, 37% (inhibited 12 to 15% methanol), USP, dms., c.l., dlvd | lb. | .0695 | — |
| tanks, dlvd. | lb. | .0430 | — |
| Formaldehyde, methanol-free (uninhibited) tanks, dlvd | lb. | .0575 | — |
| Formic acid, 85% cbys., c.l., works. | lb. | .1570 | — |
| cbys., t.c.l., works | lb. | .1620 | - .1720 |
| 90%, cbys., c.l., works | lb. | .1625 | — |
| cbys., t.c.l., works | lb. | .1675 | - .1775 |
| Fringetree bark, bls. | lb. | .65 | - .70 |
| Calcined, bgs., c.l., same basis | ton | 20.00 | - 21.75 |
| Insecticide grade, dried, powd., bgs., c.l., Ga. or Fla. mines | ton | 17.50 | — |
| Fuller's earth, oil-bleaching grade, 100-mesh, bgs., c.l., same basis | ton | 15.00 | - 17.00 |
| 200-mesh bgs. c.l., same basis | ton | 17.50 | - 18.00 |
| Spent, bgs. c.l., ship't point | ton | 4.50 | - 5.00 |
| Fumaric acid, tech., 250-lb. dms., c.l., frt. equald | lb. | .22½ | — |
| dms., t.c.l., frt. equald. | lb. | .24¼ | — |
| Furfural, dms., c.l. works | lb | 15 | — |
| dms., t.c.l., works | lb | 14 | — |
| tanks, dlvd E. | lb | 12 | — |
| tanks, dlvd W. | lb | 13 | — |
| Furfuryl alcohol, cns., works | lb. | .23 | — |
| dms., c.l., t.l., Newark, N. J. | lb. | .20½ | — |
| dms., t.c.l., t.t.l., Newark, N. J | lb. | .21½ | — |
| dms., c.l., t.l., Memphis, Tenn | lb. | .19 | — |
| dms., t.c.l., t.t.l., Memphis, Tenn. | lb. | .21 | — |
| tanks, Memphis, Tenn. | lb. | .175 | — |
| Fusel oil, refn., dms., c.l., dlvd | lb | 18 | — |
| dms., t.c.l., dlvd | lb | 19½ | — |
| tanks dlvd. | lb | 15½ | — |

## G

| | | | |
|---|---|---|---|
| G salt, bbls. frt alld., 100% basis | lb. | .73 | — |
| Gallic acid, NF, VII, bbls. | 1,000 lb lots | lb | 2.00 | — |
| bbls., smaller lots | lb | 2.02 | 2.22 |
| Tech., bbls., 1,000-lb. lots | lb. | 1.78 | — |
| bbls. smaller lots | lb | 1.80 | 2.00 |
| Gamma acid, dry grd., bbls., frt. alld | lb. | 1.73 | — |


**Eastman**

**Alcohols**

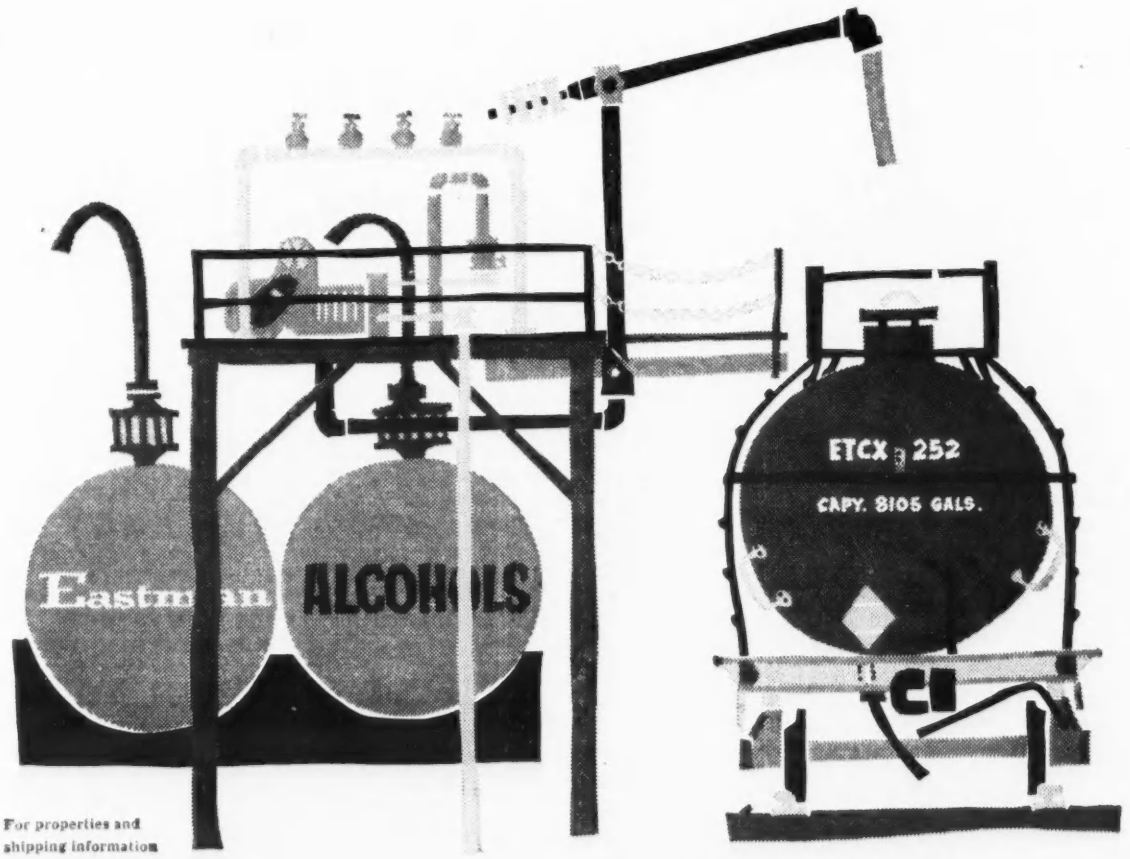
**ethyl alcohol**
95% and anhydrous

**Tecsol®**
proprietary ethyl alcohol

**isobutyl alcohol**

**2-ethylhexyl alcohol**

**2-ethylisohexyl alcohol**




For properties and shipping information on these and other Eastman products, see **Chemical Materials Catalog**, page 393 or **Chemical Week Buyers Guide**, page 97

Eastman alcohols are available in bulk from major industrial centers. For samples or specifications, write or call your nearest Eastman representative.

**Eastman** CHEMICAL PRODUCTS, INC.

KINGSPORT, TENNESSEE, subsidiary of Eastman Kodak Company

**SALES OFFICES: Eastman Chemical Products, Inc.**, Kingsport, Tennessee; Atlanta; Chicago; Cincinnati; Cleveland; Framingham, Mass.; Greensboro, N. C.; Houston; New York City; St. Louis. **West Coast: Wilson Meyer Co.**, San Francisco; Los Angeles; Portland; Salt Lake City; Seattle.

## Gammapicoline—Hydrochloric Acid

Gammapicoline (see γ picoline)
Garlic oil dom bots oz 4.75 - 6.05
Imp bots oz 4.50 - 5.00
Gaultheria oil (see Wintergreen oil).
Gelatin, edible, 75 AOAC test, bbls., c.l., dlvd lb. .55 - —
150 AOAC test, bbls., c.l., dlvd. lb. .64 - —
200 AOAC test, bbls., c.l., dlvd. lb. .70 - —
225 AOAC test, bbls., c.l., dlvd. lb. .74 - —
275 AOAC test, bbls., c.l., dlvd. lb. .92 - —
Gelsemium root, bls lb. .20 - .25
Gentian root, pls lb .24 - —
Grd bbls bxs lb .30 - —
Powd. bbls bxs lb .30 - —
Geraniol extra cns, dms lb 2.00 - 3.65
Soap grade, dms lb 1.65 - 1.90
Standard cns, dms lb 2.00 - 3.40
Geranium oil, Algerian, cns lb. 19.00 - —
Bourbon, cns. lb 25.00 - —
Geranium oil Turkish (see Palmarosa oil)
Geranyl acetate, cns lb 1.90 - 2.70
Ginger oil, dist., bots lb. 11.50 - 14.00
Ginger oleoresin NF from African root, bots lb. 4.25 - 5.00
NF, from Jamaican root, bots. lb. 7.75 - —
Ginger root, Cochin, bgs. lb. .27 - —
Jamaican No. 3, bgs lb .32 - —
Nigerian, split, bgs lb. .16 - —
Sierra Leone, bgs. lb. .29 - —

Glauber's salt (see Sodium sulfate).
Gluconic acid tech 50% dms., c.l., c.l. frt alld lb. .18 - —
dms t.c.l. frt alld lb. .20½ - —
tanks frt alld lb. .13½ - —
Glue, bone, extracted dry bone, 86 jellygrams bgs c.l. dlvd. lb. .16 - —
131 jellygrams, bgs. c.l., same basis lb. .16½ - —
164 jellygrams, ngs. c.l., same basis lb .18½ - —
191 jellygrams, ngs c.l., same basis lb. .19½ - —
222 jellygrams, ngs c.l., same basis lb. .21 - —
Glue, bone, green, 40 jellygrams, bgs., c.l., same basis lb .16- —
86 jellygrams, bgs. c.l., same basis lb 16 - —
115 jellygrams, bgs., c.l., same basis lb. .16½ - —
135 jellygrams, bgs. c.l., same basis lb. .17½ - —
164 jellygrams, bgs. c.l., same basis lb. .18½ - —
180 jellygrams, bgs., c.l., same basis lb. .19½ - —
200 jellygrams, bgs., c.l., same basis lb. .20½ - —
Bone glue t.c.l. prices 2c higher.
Glue, hide, 70-94 jellygrams, ngs., c.l., dlvd lb. .18 - —
95-149, bgs., c.l., dlvd lb. .19 - —
122-149, bgs., c.l., dlvd lb. .20½ - —

Glue, hide, 150-177, bgs., c.l., dlvd. lb. .22½ - —
178-206, bgs., c.l., dlvd. lb. .25 - —
207-236, bgs., c.l., dlvd lb. .28 - —
237-266, bgs., c.l., dlvd lb. .30½ - —
267-298, bgs., c.l., dlvd lb. .32½ - —
299-330, bgs., c.l., dlvd lb. .34½ - —
331-362, bgs., c.l., dlvd lb. .36½ - —
363-394, bgs., c.l., dlvd. lb. .38 - —
395-427, bgs., c.l., dlvd lb. .40 - —
428-460, bgs., c.l., dlvd lb. .42 - —
461-494 bgs., c.l., dlvd lb. .44 - —
495-529, bgs., c.l., dlvd lb. .46 - —
Hide glue t.c.l. prices 2c higher.
l-Glutamic acid, 99½%, 6lb dms., 100-lb lots, frt alld lb 1.80 - —
6lb dms., 25-lb. lots, frt. alld. lb 1.88 - —
l-Glutamine, bots., 1-9 kilo lots, kilo 150.00 - 300.00
Bots., 50-kilo lots kilo. 100.00 - —
Bots., 500-kilo lots kilo. 75.00 - —
Glycerine dom, nat., crude saponification, 88%, tanks, dlvd lb. .21½ - .21¾
nat. crude soaplye 80% tanks, dlvd lb. .19 - .19¾
nat., refd., USP, CP, 99%, dms., c.l., dlvd lb. .30½ - —
dms., t.c.l., dlvd lb. .31⅝ - —
tanks, dlvd. lb. .29⅛ - —
nat., refd., USP, CP, 96%, dms., c.l., dlvd lb. .30 - —
dms., t.c.l., dlvd lb. .30¾ - —
tanks, dlvd. lb. .28¾ - —
nat., high gravity, dms., c.l., dlvd. lb. .30¾ - —
dms., t.c.l., dlvd lb. .31½ - —
tanks, dlvd lb. .29 - —
syn., dms., c.l., dlvd lb. .31 - —
dms., t.c.l., dlvd lb. .31¾ - —
tanks, dlvd. lb. .29¼ - —
Imp. nat., crude, soaplye, 80%, c.i.f. lb. .19 Nom.

Glycine (see Aminoacetic acid).
Glycerol (see Glycerine).
Glycolic acid (see Hydroxyacetic acid).
Glycolonitrile, 70% aqueous, dms., c.l., t.l., works lb. .39 - —
dms., t.c.l., same basis lb. .40 - —
tanks, same basis lb. .39 - —
Glyoxal, 30%, dms., c.l., works lb .20½ - —
dms., t.c.l works lb. .21¼ - —
tanks works lb. .18 - —
Golden seal root, NF, tested, bls. lb. 2.73 - 3.25
Gramicidin 1 to 5 kilos f.o.b. works, gram 4.70 - —
Grapefruit oil, dms. lb. 2.10 - 2.50
Graphite, amorp, powd., bgs., fib. dms., ex whse lb. .06 - .09¼
Cryst., 88-90%, powd., bgs., fib. dms ex whse lb. .19 - .21¼
90-92%, powd., bgs., fib. dms., ex whse lb. .21 - .24¼
95-97%, powd., bgs., fib. dms., ex-whse lb. .29 - .31¼
Flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
No. 2, 90-95% bgs., fib. dms., ex whse lb. .29 31
Grease white, choice all hog, tanks, dlvd lb. .06⅝ - .06¾
Yellow, tanks, dlvd. lb. .05⅝ - .05¼
Grease oil, No. 1, dms., c.l. lb. .13¾ Nom.
dms., t.c.l. lb. .14¾ Nom.
Extra winter, strained, dms. c.l. lb. .16¼ Nom.
dms., t.c.l. .17¼ Nom.
Prime, burning, dms., c.l. lb. .17¾ Nom.
dms., t.c.l. lb. .18¾ Nom.

**GREEN PIGMENTS**
**Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.**

Grindelia robusta herb, bls lb. .40 - —
Guaiacol, NF, cryst., dms., tins lb 2.10 - 2.15
NF, liq. cbys. dms lb 2.30 2.40
Guaiacol carbonate NF VII, dms lb 3.40 3.45
Guaiacwood oil cns lb 75 1.30
Guar gum, food grade bgs., c.l lb. .38 - —
bgs., 5,000 lbs. or more lb. .39 - —
Indust., bgs. c.l. lb .32 - —
Tech grade, bgs lb .30 .33

**GUMS**
**Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.**

Gypsum, plaster of Paris, 100-lb paper bgs., trucks, dlvd New York ton 20.30 - —
Terra alba dom., 100-lb paper bgs., trucks, same basis ton 20.00 - —
100-lb paper bgs., trucks works, New York ton 17.00 - —
Terra alba, imp., English, 100-lb. paper bgs., l.c.l., ex dock, New York ton 55.00 - —
100-lb paper bgs. ex whse ton 60.00 - 62.00

## H

H acid dry bbls. c.l., frt. alld., 100% basis lb. .90 - —
bbls., t.c.l. same basis lb 95 - —
Hansa yellow 10 G. bbls. dlvd E of Rockies lb 2.45 - —
Hansa G yellow, pigment bbls lb 2.20 - —
Hawthorn berries, bgs. lb 18 - 20
Heliotropin, 100-lb. lots, dms. lb. 2.60 - 3.40
Hellebore root dom green bls lb 70 75
Helonias root bls lb 1.50 —
Hemlock oil, cns lb 2.55 3.00
Henbane leaves, bls. lb. .35 - .40
Heptachlor, dms., c.l., t.l., frt. alld., 100% basis lb. .96 - —
deptane, industrial, tankcars, New Jersey and New York, gal. .20 - —
Houston, Texas gal. .16.5 - —
Hesperidin purif. 100-lb fib dms. f.o.b. works lb 8.95 - —
Hesperidin methylchalcone, bots. 50-lb lots works lb 22.50 - —
bots. 5 lb lots, works lb 23.00 - —
bots. 1-lb lots works lb 23.50 - —
Hexachloropnene, dms., 1,100 lbs., or more lb 1.84 - —
dms., to 1,100 lbs lb. 1.94 - —
Hexalin (see Cyclohexanol)
Hexamethylenetetramine tech bgs., 20,000-lb lots or more, Perth Amboy or New York City lb. .233 - —
bgs., 1,000-19,999-lb lots, same basis lb. .243 —
bgs. smaller lots same basis lb. .253 —
fib. dms., 1,000-lb. lots or more, same basis lb. .250 - —
fib. dms. smaller lots, same basis lb. .253 - —
USP bgs. 500 lbs or more f.o.b. Fords N. J. dlvd New York City and Philadelphia, lb., 42½ - —
bgs. smaller lots same basis lb 43½ 48¼
Hexane, industrial, tankcars, New Jersey and New York, gal .20 - —
Houston, Texas gal. .16 - —
l-Hexanol dms., c.l. works lb. .35 - —
dms., t.c.l. works lb. .35¾ - —
tanks works lb. .33 - —
Hexyl cinnamic aldehyde, dms lb. 4.00 7.50
α-Hexyl methacrylate, dms., c.l., works lb. .75½ - —
dms. t.c.l. works lb. .76 - —
Hexyl salicylate dms. lb. 1.75 - —
Hexylene glycol, dms. c.l., dlvd lb. .17½ - —
dms., t.c.l. dlvd lb. .19 - —
tanks, dlvd. lb .15 - —
Hexylresorcinol, USP dms., 25-lb lots or more, dlvd lb 14.00 - —
dms., smaller lots dlvd. lb. 14.50 - —
Homatropine hydrobromide, USP bots oz. 3.25 - —
Homatropine methylbromide, USP bots oz. 3.25 - —
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton 6.75 - —
Horehound herb, bls lb. .18 - .20
Hydrastis (see Goldenseal)
Hydrazine hydrate, 85% ref. dms., works lb 1.35 1.55
100% ref. dms., works lb 1.60 1.90
Hydriodic acid, purif., 47%, 2-cbys., f.o.b. works lb. 2.92 - —
Hydroabietyl alcohol, tech., solid, dms. c.l., dlvd zone 1 lb. 29¼ - —
dms. t.c.l. dlvd zone 1 lb. 29¾ .30¼
tanks dlvd zone 1 lb 27¼ - —
Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo. and the western part of Texas.
Hydrobromic acid, medicinal, 45%, cbys. frt equald lb. .48 - .50
Hydrochloric acid, anhyd. (see Hydrogen chloride)


here are the facts on
PHOSPHATE and EPOXY
# PLASTICIZERS FROM CELANESE

**LINDOL:** *Tricresyl phosphate, low color.* Low volatility, good resistance to extraction by oils, superior color. Standard for vinyls and cellulosics.

**CELLUFLEX 179A:** *Tricresyl phosphate, low specific gravity.* Lowest ortho content commercially available.

**CELLUFLEX 179C:** *Tricresyl phosphate, general purpose grade.* Excellent solvent power and flame retardance. Low volatility. For coatings and films demanding toughness and flame resistance.

**CELLUFLEX 179EG:** *Tricresyl phosphate, electrical grade.* To make plastic insulations. Offers flame resistance, outstanding electrical properties, low weight per unit volume.

**CELLUPHOS 4:** *Tributyl phosphate.* Plasticizer for resins and rubbers. Foam depressant. Selective solvent.

**CELLUFLEX TPP:** *Triphenyl phosphate.* Excellent fire resistance, good flexibility. Produces clear, tough compositions. Widely used for cellulose acetate.

**CELLUFLEX 112:** *Cresyl diphenyl phosphate.* High degree of flame resistance in vinyl formulations. Improved low temperature and light exposure properties.

**CELLUFLEX CEF:** *Tris beta-chloroethyl phosphate.* Exceptional flame retardance.

**CELLUFLEX FR-2:** *Tris dichloropropyl phosphate.* Exceptional flame retardance. Effective with wide variety of resins, both thermoplastic and thermosetting.

**CELLUFLEX 23:** *Alkyl epoxystearate.* Economical low-temperature plasticizer and stabilizer for polyvinyl chloride and other polymers. Very low volatility.

A thought to keep in mind—Celanese' shipment policies permit quick action to meet tight schedules. We ship from convenient points throughout the United States. We'll be glad to provide you with specifications on any of these plasticizers. For more information, write to: Celanese Chemical Company, a Division of Celanese Corporation of America, Dept. 656-B, 180 Madison Avenue, New York 16, N. Y.

Celanese® Lindol® Celluflex® Celluphos®

*Canadian Affiliate:* Canadian Chemical Company, Limited, Montreal, Toronto, Vancouver
*Export Sales:* Amcel Co., Inc., and Pan Amcel Co., Inc., 180 Madison Avenue, New York 16, N. Y.

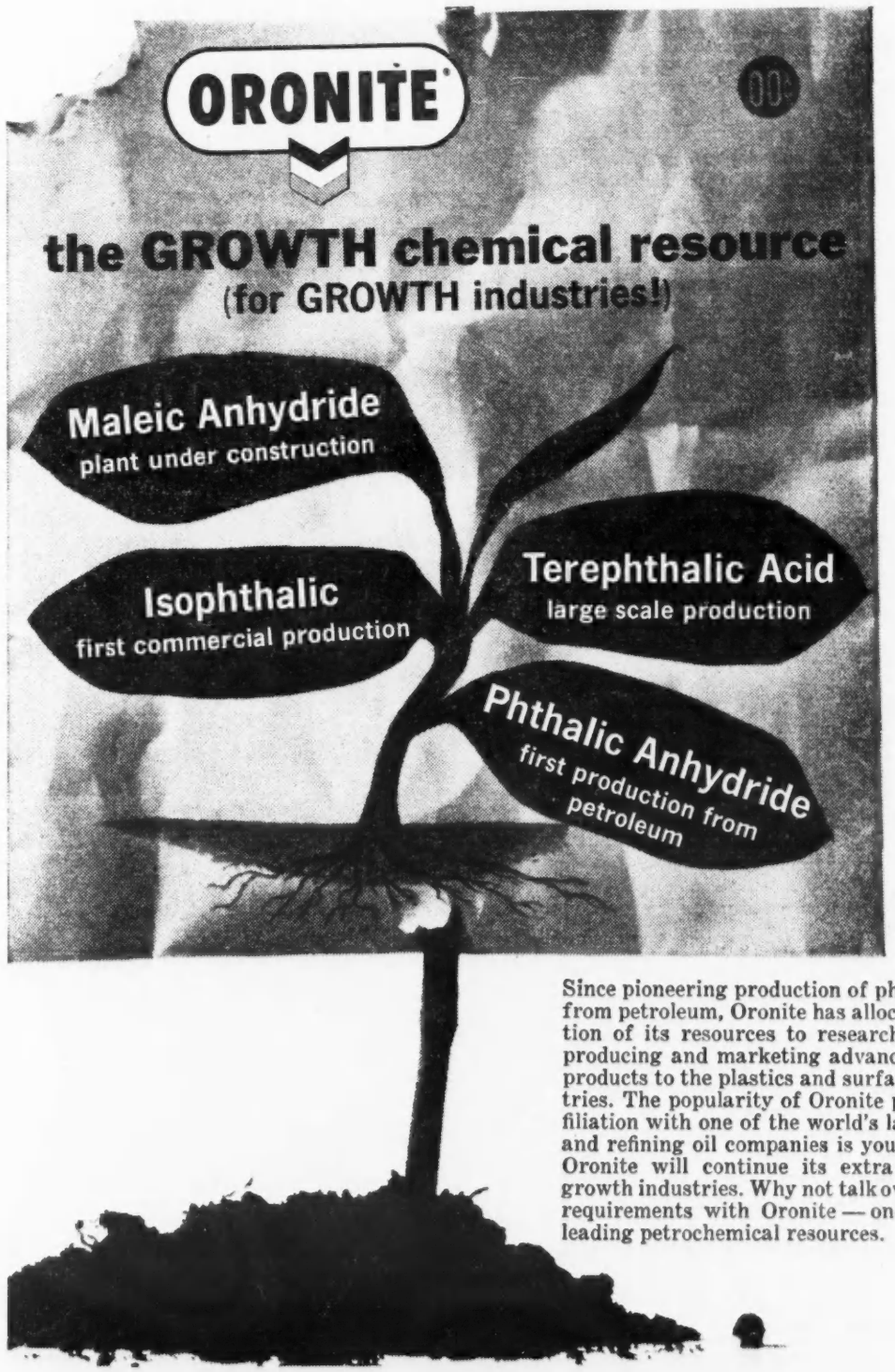
Hydrochloric acid, 18°, cbys., c.l., works..100 lbs. 2.50 - —
cbys., l.c.l., dlvd. Metropolitan area..100 lbs. 2.90 - 3.05
tanks, works, frt. equald ton.28.00 - —
20°, cbys., c.l., works..100 lbs. 2.75 - —
cbys., l.c.l., dlvd. Metropolitan area..100-lbs. 3.15 - —
tanks, works frt. equald .. ton.30.00 - —
22°, cbys., c.l., works....100 lbs. 3.25 - —
cbys., l.c.l., dlvd. Metropolitan area..100 lbs. 3.65 - —
tanks, works frt. equald ... ton.33.00 - —
CP, USP, consumers cbys., extra, c.l., works..lb. .15¾ - —
cbys., l.c.l., same basis..lb. .17¼- .17¾
Hydrochloric acid, 5-pint bots., extra cs. c.l., same basis..lb. .20¾- —
Hydrocortisone acetate, bulk, bots., kilo lots or more..gram. 1.10 - 1.90
Hydrocortisone alcohol, bulk, bots., kilo lots or more..gram. 1.10 - 1.90
Hydrocyanic acid, dilute, NF, 2%, 5-pt. bots., f.o.b. works..pt. .70 - —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride)
Hydrofluoric acid, aqueous, 70%, 55-gal. or 30-gal. dms., c.l., t.l., dlvd..100 lbs.19.25 - —
55-gal. dms., l.c.l., t.l.l., dlvd. 100 lbs.20.75 - —
20-gal. dms., c.l., t.l., dlvd. 100 lbs.21.00 - —
20-gal. dms., l.c.l., t.l.l., dlvd 100 lbs.22.50 - —
tanks, works, frt. equald. 100 lbs.13.40 - —
Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming. In those states add $2.70 per cwt. for drum delivery.
Hydrofluosilicic acid, dms., works, 30% basis lb. .06 - —
Hydrofuramide, dms., fib. ctns., works lb. .30 - .40
50-lb. cyls., l.c.l., works..... lb. .53 - .60
Hydrogen chloride, anhyd., 50-lb. cyls., l.c.l., works lb. .43 - —
Hydrogen cyanide, liq., 98%, tanks, works..lb. .14 - —
Hydrogen fluoride, anhyd., cyls., dlvd. E lb. .30½- .32½
cyls. dlvd. W. .....lb. .39 - —
tanks, works .....lb. .18 - —
Hydrogen peroxide 35%, dms., c.l., dlvd lb. .202 - —
dms., l.c.l., dlvd. .....lb. .211 - —
tanks, dlvd. .....lb. .1800- —
Hydroquinone, photo grade, dms., 50-lbs., f.o.b. works..lb. 1.10 - —
Tech., dms., c.l., dlvd. .....lb. .82½- —
dms., l.c.l. dlvd. .....lb. .84½- —
Hydroquinone, monomethyl ether, dms., t.l., dlvd. .....lb. 2.59 - —
dms., l.t.l., dlvd. .....lb. 2.91 - —
Hydroxyacetic acid, tech., 70%, dms., Philadelphia and Chicago lb. .11 - —
tanks, Belle, W. Va. ..... lb. .073 - —
Hydroxycitronellol, cns. .....lb. 3.75 - —
Hydroxyethyl cellulose, low viscosity grades, fib. dms., 20,000-lb.lots or more, f.o.b. shipping point, lb. .96 - —
fib. dms., 2,000 to 19,999-lb. lots, same basis..lb. .99 - —
Hydroxyethyl cellulose, low viscosity grades, fib. dms., 150 to 1,999-lb. lots, same basis..lb. 1.02 - —
fib. dms., less than 150-lb. lots, same basis..lb. 1.12 - —
Hydroxyethyl cellulose high viscosity grades, fib. dms., 20,000-lb. lots or more, f.o.b. shipping point..lb. 1.01 - —
fib. dms., 2,000 to 19,999-lb. lots, same basis..lb. 1.04 - —
fib., dms., 83 to 1,999-lb. lots, same basis..lb. 1.07 - —
fib. dms., less than 83-lb. lots same basis..lb. 1.17 - —
Hyoscine salts (see Scopolamine)
Hyoscyamine hydrobromide, bots oz. 7.00 - —
Hyoscyamine sulfate, bots. ..... oz. 7.00 - —
Hypophosphorous acid, purif., 50%, 10-cbys., f.o.b. works..lb. 1.95 - —
NF, 50%, 10-cbys., same basis..lb. 1.35 - —

## I

Ichthammol, NF, dms. .....lb. .75 - 1.05
Indigo (see Dyes coaltar, 1171 indigo, syn).
Indole, CP, bots .....lb.14.75 -18.25
Inositol, bots., dlvd. .....lb. 5.00 - —
dms., dlvd. .....lb. 4.50 - 4.75
Insect flowers (see Pyrethrum).
Iodine, crude, kgs. .....lb. .93 - —
Resub., USP, dms., f.o.b. works lb. 2.00 - 2.02
Iodochlorohydroquinolin, USP, dms. lb. 3.60 - —
Iodoform, NF, dms., 300-lbs., f.o.b. works..lb. 4.90 - —
dms., 100-lbs., same basis....lb. 5.05 - —
a-Ionone, cns. .....lb. 4.60 - 5.75
b-Ionone, cns. .....lb. 4.15 - 6.15
Ipecac root, whole, bgs .....lb. 8.00 - 8.50
Powd., bbls., bxs. .....lb. 9.50 -10.00
Irish moss, bleached, prime, bls..lb. .20 - .23
Iron blue, alkali-resisting, bbls., c.l., dlvd. E lb. .57 - —
bbls. l.c.l. ton lots same basis. lb. .58 - —
bbls. smaller lots same basis lb. .59 - —
Dom., reg., bbls., c.l., dlvd. E..lb. .52 - —
bbls. l.c.l., ton lots, same basis lb. .53 - —
bbls. l.c.l., smaller lots, same basis lb. .54 - —
Imp., British, reg., bbls., c.l., dlvd. E..lb. .48 - —
bbls., l.c.l., ton lots same basis lb. .49 - —
bbls., l.c.l., smaller lots, same basis..lb. .50 - —
Iron blue dlvd. prices 1c. higher for Pacific Coast states:—Wash., Ore., Cal., N. M., Ariz., Mon., Wyo. Utah, Col and Nev.
Iron compounds (see Ferric or Ferrous)
Iron oxide, black, pure, bgs., c.l., works lb. .14¾- —
bgs., l.c.l., works.....lb. .15 - —
Iron oxide, brown, pure, bgs., c.l., works lb. .14¼- —
bgs., l.c.l., works .....lb. .14½- —
Iron oxide, metallic brown, bgs., works lb. .05¼- —
Iron oxide, Persian Gulf, red, bgs., c.l. works lb. .08¾- —
Iron oxide, red, dom., pure, bgs., Bethlehem, Easton & St. Louis, New York City..lb. .14¼- —
Iron oxide, red nat. 75-85% ferric oxide, bgs. c.l. works lb. .06¼- —
bgs. l.c.l., works ..... lb. .06½- —
Iron oxide, Spanish red, bbls., c.l., ex dock lb. .05¾ Nom.
bbls. l.c.l. ex dock ..... lb. .06 Nom.
bbls. l.c.l. ex whse New York. lb. .06½ Nom.
Iron oxide, yellow, nat., French type, bgs., c.l., works lb. .06¼- —
Peruvian type bgs. l.c.l lb. .023 - .024
Iron oxide, yellow, pure, light lemon shade bgs. c.l. works lb. .12¼- —
Other shades same basis lb. .12 - —
Isoamyl alcohol, dms., c.l., works, frt. alld. E lb. .27½- —
dms., l.c.l., same basis..... lb. .29 - —
tanks, same basis.....lb. .25 - —
Isoborneol, cns. .....lb. 1.44 - 1.80
Isobornyl acetate, cns. .....lb. .46 - .58
Isobornyl formate, dms. .....lb. 1.20 - —
Isobornyl proprionate dms. .....lb. 1.25 - 1.35
Isobutyl acetate, perfume grade, cns..lb. .35 - —
Isobutyl acetate, solvent grade, dms., c.l., dlvd. E. of Rockies..lb. .15¼- —
dms., l.c.l. same basis .....lb. .16¾- —
tanks same basis .....lb. .12¾- —
Isobutyl alcohol dms., c.l., dlvd. lb. .15½- —
dms., l.c.l., dlvd. .....lb. .17 - —
tanks, dlvd. .....lb. .13 - —
Isobutylene, 99%, tanks, works..gal. .38 - —
Isobutyl isobutyrate, dms., f.o.b. works..lb. .75 - —
Isobutyraldehyde, CP, dms., c.l., dlvd lb. .27½- —
dms. l.c.l., dlvd. .....lb. .28½- —
Tech., dms., c.l., dlvd.....lb. .22 - —
dms., l.c.l., dlvd. .....lb. .23 - —
tanks, dlvd. .....lb. .19½- —
Isobutyronitrile, dms., c.l., dlvd..lb. .52 - —
dms., l.c.l., same basis.....lb. .57 - —
Isobutyric acid, dms., c.l., t.l., dlvd. lb. .33 - —
dms., l.c.l., l.t.l., same basis....lb. .36½- —
t.c., t.t., same basis .....lb. .33 - —
Isoeugenol, cns. .....lb. 3.40 - 4.25
Isoniazid, powd., bulk, kilo or more kilo.18.00 - —
Isonicotinic acid, 100-lb. fib dms., works lb. 4.25 - —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms., c.l., dlvd E. lb. .23½- —
dms., l.c.l., dlvd E ..... lb. .25 - —
tanks, dlvd E. .....lb. .21 - —
Isopentane, comi. grade, tanks, f.o.b. Tex. refy gal. .15½- —
Isophorone, dms., c.l., works ....lb. .24½- —
dms., l.c.l., works ..... lb. .25¼- —
tanks, works. .....lb. .22½- —
Isophthalic acid, dms., c.l., works, frt. equald lb. .152 - —
dms., l.c.l., same basis ..... lb. .162 - —
Isopropanol (see isopropyl alcohol).
Isopropyl acetate, dms., c.l., dlvd. lb. .14 - —
dms, l.c.l., same basis ..... lb. .15½- —
tanks, same basis ..... lb. .11½- —
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd gal. .58 - —
dms., l.c.l., dlvd..... gal. .63 - —
tanks, dlvd. ..... gal. .42 - —
95%, c.l., dms., dlvd.....gal. .60 - —
dms., l.c.l., dlvd.....gal. .70 - —
tanks dlvd ..... gal. .44 - —
anhyd., c.l., dlvd. .....gal. .62 - —
dms., l.c.l., dlvd ..... gal. .72 - —
tanks, dlvd. ..... gal. .46 - —
Isopropyl benzene (see Cumene).
Isopropyl ether, dms., c.l., dlvd lb. .09½- —
dms., l.c.l., dlvd ..... lb. .11 - —
tanks, dlvd ..... lb. .07 - —
Isopropyl-N-(3-chlorophenyl)- carbamate (CIPC), tech., dms., c.l., t.l., works lb 1.00 —
dms., l.c.l., works ..... lb. 1.05 1.25
tanks, works. ..... lb. .99 —
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works lb. .75 —
450-lb fib dms., l.c.l., works . lb. .80 .90
Isoquinoline dms., works ..... lb. .65 1.25
Itaconic acid, refd. bgs. c.l., f.o.b. works lb. .53½- —
bgs., l.c.l., same basis ..... lb. .54½- —
Tech., bgs., c.l., same basis lb. .38½- —
bgs., l.c.l., same basis.....lb. .39½- —

## J

J acid, paste, bbls., works, 100% basis lb 2.70 - —
Powd. bbls. same basis..... lb 2.75 - —
Jalap root, NF, bls. .....lb. .60 - —
NF, powd., bbls., bxs. .....lb. .70 - .75
Japan wax, cs .....lb. .27 .29
Juniper berries, bgs.....lb. .16 - .17
Juniper berry oil, NF, bots.....lb. 2.90 3.75
Twice rectified bots. .....lb. 3.25 —
Juniper tar oil NF dms .....lb. .42 .60
Juniper wood oil, tech., cns. ....lb. .38 - .55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9219

## K

Kaolin (see also Clay China).
Kaolin, NF, powd., fib dms. ... lb. .10 - .12
NF, colloidal, 50-lb. bgs .... lb. .15½- .17½
Karaya gum No 1, NF powd. bls lb. .45 - .48
No 2, powd., bbls. ..... lb. .40 - .42
No 3, powd., bbls ..... lb. .35 - .37
Koch acid, bbls., frt. alld., 100% basis lb 1.00 - —
Kola nuts, bgs. ..... lb. .13 - .15

## L

L acid, bbls works lb 1.25 - —
Lacquer diluent, petroleum, 140°F-200°F b.r., tankcars, New Jersey and New York gal. .20 - —
Group 3 ..... gal. .15125- —
Houston, Texas ..... gal. .16 - —
200°F-240°F b.r., tankcars, New Jersey or New York gal. .20 - —
Group 3 ..... gal. .14125- —
Houston, Texas ..... gal. .16 - —
Lactic acid, edible, 50%, bbls. dms., c.l., frt. equald lb. .1985- —
bbls. dms. 20 or more, frt. equald lb. .2035- —
bbls dms. 5 to 19 frt equald lb .2085- —
bbls., dms., 1 to 4, frt. equald. lb. .2135- —
Lactic acid, edible, 80%, bbls., c.l., dms., frt. equald. lb. .3335- —
bbls., dms., 20 or more, frt. equald lb. .3385- —
bbls. dms 5 to 19 frt. equald. lb. .3435- —
bbls., dms., 1 to 4, frt. equald. lb. .3485- —
Plastic grade, 50%, c.l., bbls., works lb. .2740- —
bbls., 20 or more, works lb. .2790- —
bbls., 5 to 19, works .... lb. .2840- —
bbls., 1 to 4, works ..... lb. .2890- —
80%, bbls., c.l works..... lb. .4625- —
bbls. 5 to 19, works .... lb. 4725- —
bbls., 1 to 4, works lb. 4775- —
Tech., 44% bbls. c.l. works 100 lbs.12.45 - —
bbls., l.c.l., works... 100 lbs.12.85 - —
USP, 85% cbys. ..... lb. .85 - —
Lactose, crystalline, edible, bgs., 23,000-lb. lots, frt. equald lb. .14 - —
bgs., 6,000-lb lots, frt. equald lb. .14½- —
bgs., 2,000-lb. lots, frt equald lb. .14¾- —
bgs., 200-lb lots, frt. equald lb. .15¼- —
Edible lactose in fib dms., ½c. higher.
Lactose, terment grade bgs., c.l., works lb. .08½- —
USP, reg., fib. dms., 30,000-lb. lots, frt. equald lb. .21½- —
fib. dms. 2,000-lb lots, frt. equald lb. .22¼- —
200-1,880-lb. lots, frt. equald lb. .22¾- —
USP lactose in bags ½c to 1c lower
Lactose, USP spray dried, bgs., t.l., frt. equald lb. .13¼- —
bgs., l.t.l., frt. equald ... lb .19 .19¾
Lady's slipper root, bls..... lb. 3.00 - 3.50
Lake C red toner, alizarine, bbls., works lb. 1.25 - —
Lamp black, bgs. c.l., works lb. .16 - .45
Lanolin, USP, anhyd., 400-lb. dms., works lb. .24 - .26
USP, anhyd., cosmetic, 400-lb. dms., works lb. .26 - .30
USP, hydrous, 400-lb. dms., works, lb. .24 - —
Lard, cash, dms., Chicago ..... lb. .0845- —
Lard oil (see Grease oil).
Larkspur seed, bgs ..... lb. .40 - .45
Laurel leaf oil, dms. cns. ..... lb 9.75 -12.50
Laurent's acid, bbls ..... lb. .70 - —
Laurie acid, pure, dms ..... lb. .38½- .41
tanks ..... lb. .36 - .37
Lauryl alcohol, bots ..... lb 2.00 2.50
n-Lauryl methacryiate, dms., c.l., t.l. works lb. .65½- —
dms., l.t.l., works ..... lb. .66 - —
Lavandin oil, 22-24%, dms. ..... lb 1.10 - 1.50
Abrial, dms. ..... lb 1.00 1.50
Lavender flowers, medium, bls lb .55 - .60
Ord., bls. ..... lb .20 - .25
Select., bls. ..... lb .90 1.00
Lavender flower oil, USP, French 35-37% ester, cns lb. 1.85 - 4.00
40-42% ester cns ..... lb 5.00 - 7.75
Spike, Spanish, cns ..... lb 2.20 3.00
Lead acetate, NF, cryst., gran., powd., bbls lb. .34½- —
White, cryst., bbls. ..... lb. .25½- —
gran., bbls. ..... lb. .26½- —
powd. bbls ..... lb. .26½- —
Lead arsenate acid powder, dealers, 3-50 lb. bgs or any quantity, frt alld. on $150 or more lb. .30½- —
1-lb. bgs., same basis .... lb. .47 - —
Lead, blue, basic sulfate, bbls. c.l., shipt point, frt. alld. ... lb. .17 - —
bbls., l.c.l., same basis ..... lb. .18 - —
Lead carbonate (see Lead, white, basic carbonate)
Lead chloride, dms. ..... lb. .52 - —
Lead iodide NF V jars ..... lb. 3.82 - —
Lead linoleate fused, 26% Pb dms. lb. .38 - —
Lead metal prime, pigs, New York, lb. .12½- —
St. Louis ..... lb. .1230- —
Lead monosilicate, bgs., c.l., works, frt. equald lb. .1385- —
bgs., l.c.l., same basis ..... lb. .1485- —
Lead naphthenate, liq., 16% Pb, dms., dlvd lb. .19½- —
24% Pb, dms., dlvd. ..... lb. .24¼- —
Solid, 37% Pb, dms., dlvd. .. lb. .31¾- —
Lead nitrate, bbls. ..... lb. .24¼- .26¼
Lead orthosilicate-gel, 50-60% PbO, dms., works lb. .29¾ .34¼
Lead peroxide, tech. powd. bbls lb. .45 - .50
Lead phthalate dibasic dms. works, lb .41 - —
Lead, red, 95% $Pb_3O_4$ or less, bbls., c.l., works, frt. equald. lb. .1425- —
bbls., l.c.l., same basis. lb. .1525- —
97% $Pb_3O_4$, bbls., c.l., same basis lb. .1445- —
bbls, l.c.l., same basis .... lb. .1545- —
98% $Pb_3O_4$, bbls., c.l., same basis lb. .1460- —
bbls., l.c.l., same basis .. lb. .1560- —
Lead resinate precip 23% Pb. dms. ton lots, dlvd lb. .43¾- —
Lead salicylate normal dms. works, lb .46 - —
Lead silicate (see Lead white basic silicate).
Lead silicochromate, bgs., c.l., f.o.b. mfrs. point, frt. alld lb. .20 - —
bgs., l.c.l., same basis ..... lb .21 - —
Lead sulfate (see Lead blue basic sulfate)
Lead tallate, liq., 16% Pb, dms lb. .17¼- —
24% Pb, dms ..... lb. .25¾- —
Solid, 30% Pb, dms ..... lb. .23¼ —
Lead, white, basic carbonate, bgs., c.l., shipt. pt. frt. alld lb. .18 - —
bgs., l.c.l., same basis ..... lb. .19 - —
Lead, white, basic silicate, bgs., c.l., shipt pt., frt. alld lb. .16½- —
bgs., l.c.l., same basis ..... lb. .17½- —
Lead, white basic sulfate bgs., c.l., shipt. pt., frt. alld lb. .17 - —
bgs. l.c.l., same basis ..... lb. .18 - —
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works, lb. .14 - .15
non-ret. dms., l.c.l., same basis lb. .15 - .16
unbleached, non-ret. dms., c.l., same basis lb. .13 - .14
non-ret. dms. l.c.l., same basis lb. .14 - .15
Lemon bioflavonoid complex, 100-lb. fib. dms., works lb. 7.70 - —
Lemon oil, USP Calif. cns., dms lb. 1.40 - 1.50
Messina, cns. ..... lb. 3.75 5.00
Lemongrass oil, cns., dms ..... lb. 2.00 - 2.20
dl-Leucine, dms. works ..... lb 12.25 -15.00
Licorice root, gran., bls. ..... lb. .13 - —
Powd., bls. ..... lb. .15 - .16
Whole, bls ..... lb .09 - .10
Lignaloe wood oil, Mexican, cns lb 2.75 - 3.50
Lignosulfonate (see under ammonium or sodium lignin sulfonate)
Lime, chemical (quicklime), bulk, c.l., 50,000 lbs., works, E. ton 14.25 - —
Chemical, hydrated, bgs., c.l., same basis ton 17.25 - —
Chemical, spray, bgs, c.l., same basis ton 18.25 - —
For New York delivery, add $6.29 freight charge
Lime oil, dist., Mexican, cns .. lb. 5.90 - 6.75
West Indian, cns. ..... lb 6.50 7.80
Expressed, West Indian, cns lb 7.75 - 8.75
Lime salts (see Calcium)
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).
Linalool, ex bois de rose oil, dms. lb. 2.90 - 3.75
Syn., 98-100% dms., works .. lb. 3.20 - 3.60
Linalyl acetate ex bois de rose, 90-92%, dms. lb. 2.75 - 3.40
96-98%, dms. ..... lb. 3.25 - —
Syn., 98-100% dms. works lb. 3.40 - —
Lindane, 25% formulation to distributors dms. frt alld lb 1.35 - 1.50
Lindane, tech., to formulators, 250-lb. dms., 5,000 lbs., dlvd lb. 2.13 - —
100-lb. dms., 5,000-lbs., dlvd lb. 2.15 - —
250-lb. dms., less than 5,000-lbs., dlvd lb. 2.18 - —
100-lb. dms., less than 5,000-lbs., dlvd lb. 2.20 - —
Linden flowers, with leaves, bls lb. .35 - .40
Without leaves, bls ..... lb. .42 - .45
Linseed meal, expeller, 32% bulk, Minneapolis, mills ton.70.50 - —
Extracted, 34% bulk, same basis. ton.58.00 - —
Linseed oil, raw, dms., c.l., New York..lb. .1710- —
dms., l.c.l., New York..... lb. .1800- .1875
tanks, f.o.b. Minneapolis., lb. .1350- —
tanks, New York ..... lb. .1461- —
tankwagon, New York..... lb. .1511- —
Boiled linseed oil, .006c. per lb. higher
Linseed oil, acid, dist., dms. .... lb. .2060- —
Water-white, dms. ..... lb. .2360- —
Litharge coml., powd., bbls., c.l., works, frt. equald lb. .1375- —
bbls., l.c.l., same basis .. lb. .1475- —
Lithium aluminum hydride, lump, dms. works lb.33.00 -39.00
Lithium benzoate dms lb 1.65 1.67
Lithium bromide, NF, gran., bgs., works, frt. equald lb. 2.60 - —
Lithium carbonate, NF, dms. c.l., t.l., dlvd lb 1.29½- —
dms., ton lots to t.l., dlvd lb. 1.30 - 1.30¼
Tech., dms., c.l., t.l., frt alld lb. .67 - —
dms., ton lots, same basis lb. .73 - —
dms., smaller lots same basis, lb. .79 - —
Lithium chloride, CP, anhyd., dms., ton lots lb. 1.23½- —
Tech. anhyd., dms. c.l., t.l., dlvd, or works, frt. alld lb. .87 - —
dms., l.c.l. same basis lb. .88 - .92
Lithium citrate, NF, dms. ton lots, lb 1.50 - —
Lithium fluoride, dms., 20,000-lb. lots, dlvd lb 2.15 - —
bbls., ton lots and more dlvd lb 2.18½- —
bbls., less ton lots, dlvd lb 2.23½- —
Lithium hydride, powd., dms. 500-lb. lots or more, works lb 9.50 - —
Lithium hydroxide, monohydrate, dms. c.l., t.l. frt alld lb. .72 - —
dms. l.c.l. frt alld lb .73 - —
Lithium manganite, cms works lb .95 1.05
Lithium, nitrate, tech., dms., 100-lb. lots lb 1.15 1.25
Lithium salicylate, dms lb 1.60 1.70
Lithium silicate, dms., works lb 1.10 1.20
Lithium stearate, dms. c.l., works, lb 47½ —
dms. ton lots, works ..... lb. 48½ —
dms., less-ton lots, works lb .53½ —
Lithium sulfate, dms. 100-lb. lots lb 1.15 1.25
Lithium titanate, dms. works lb 1.15 1.25
Lithol red toner, barium, bbls., works lb .98 - —


**ONE LABEL** — *First Grade Only*
**ONE PRICE** — *That Saves You Money*
. . . and Perfect Performance for *Every* Purpose!

**M. C. P.**
Pure
Unadulterated
California
**LEMON OIL**
**U. S. P.**

An *Exclusively First Grade Lemon Oil* . . . Cold Pressed in California . . . and *Packed by the Producer* to Assure Highest Quality

For nearly 30 years, Mutual Citrus Products Co. has been cold-pressing California lemon oil for distribution by others. Now, M.C.P. LEMON OIL is being *prepared and packed* under the M.C.P. label. There is only *one label* and *one* quality — *the highest* — for M.C.P. LEMON OIL. Yet, M.C.P. LEMON OIL costs you *less* . . . while providing a product that is unsurpassed for flavor, purity, and dependability . . . for *every* purpose.

Produced and Packed by
**MUTUAL CITRUS PRODUCTS COMPANY**
**Since 1928 Growers and Processors of Citrus Products**

*Distributed by*

**MUTUAL CITRUS PRODUCTS CO.**
**424 South Atchison Street, Anaheim, Calif.**

**R. D. WEBB & CO., INC.**
**137 Boston Post Road, Cos Cob, Conn.**

Lithol-rubine red toner, pure bbls., works lb 1.50 - —
Resinated, bbls., works lb 1.47 - —
Lithopone, ord., bgs., c.l., dlvd E. lb .08½ —
bgs., l.c.l., dlvd E lb .07½ —
Titanated (high-strength), bgs., c.l., dlvd lb .11 - —
bgs., l.c.l., dlvd lb .12 - —
Lobelia herb, bls lb .55 - —
Lobeline sulfate, bots., 50-oz. lots, works oz 30.00 - —
Locust bean gum, powd., bgs lb .38 - .40
Lycopodium, cs. lb. 3.25 - 3.50
l-Lysine monohydrochloride, 25-lb drms lb 4.95 - —

## M

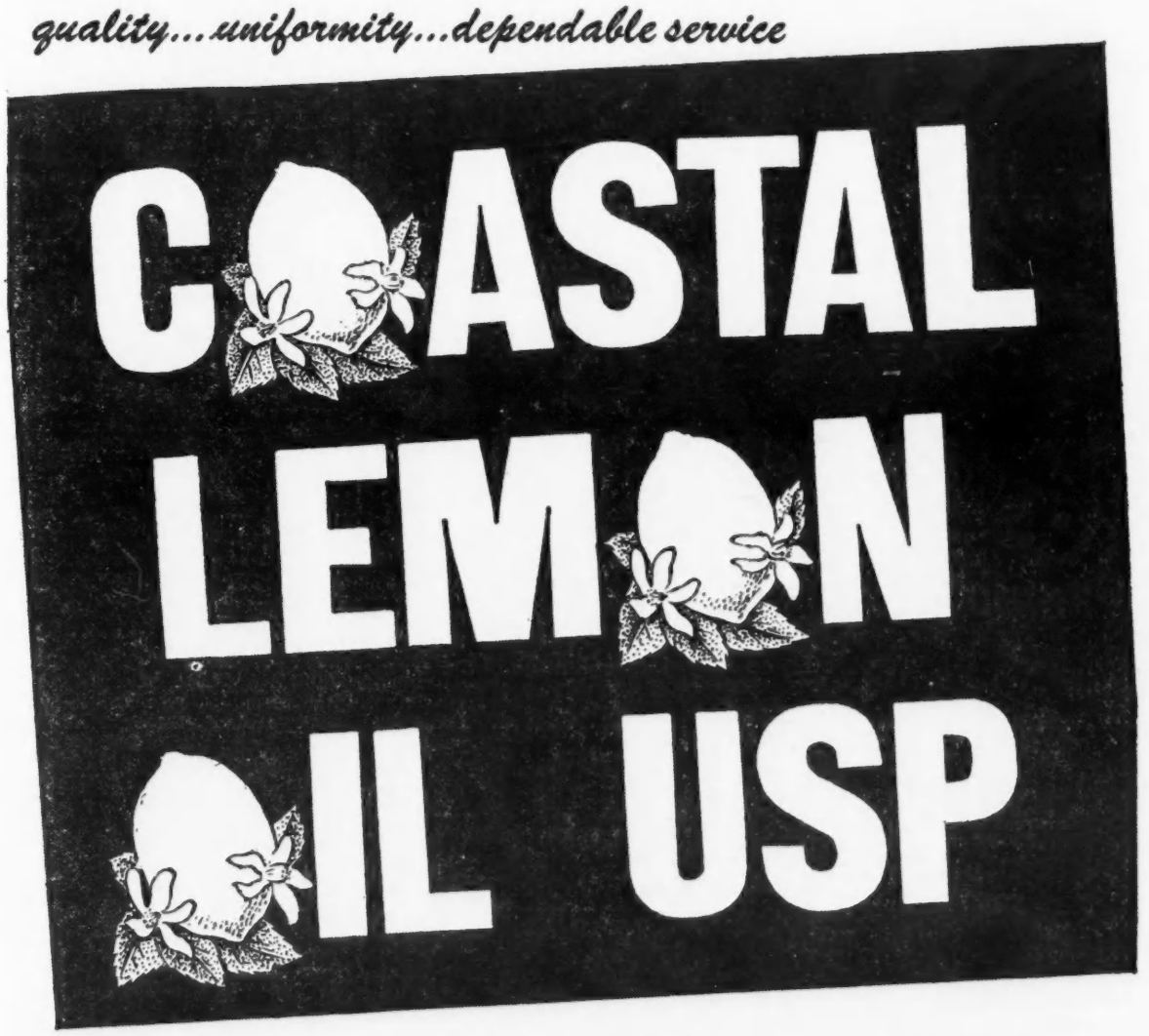
Mace, Siauw, No. 1, bls lb 1.90 - —
No. 2, whole, bls lb 1.65 - —
siftings, bls. lb 1.60 - —
Mace oil, dist., cns., drms lb 9.75 12.25
Magnesia, calcined, tech., bgs., clns., frt equald lb .25¾ .26½
Tech., syn., rubber grade, light, bgs., c.l., frt equald lb .28¾ .30
rubber grade, extra light, bgs., c.l., frt equald lb .28 —
bgs., l.c.l., frt equald lb .28¾ —
Above prices are quoted f.o.b. works, freight equald, with Metropolitan New York and competitive producing points
Magnesia, calcined, tech., heavy, 85% bgs., c.l., f.o.b. Luning, Nev. ton 39.50 - —
91% bgs., c.l., same basis ton 49.50 - —
95% bgs., c.l., same basis ton 59.00 —
USP, light, bgs. lb. .36½ - .37½
USP, heavy, bgs. lb. .36½ - .37½
Magnesite, chemical grade, calcined, powd., bgs., c.l., works frt equald ton 86.25 - —
Chemical grade, deadburnt, standard grain, bulk, c.l., Chewelah, Wash. ton 46.00 - —
Magnesium bromide, cs., tars lb .95 1.00
Magnesium carbonate, tech., bgs., c.l., frt equald lb .11 - —
bgs., t.l., frt equald lb .11½ - —
bgs., l.c.l., frt equald lb .13½ - .14
USP, bgs., c.l., frt. equald lb .13½ - —
bgs., t.l., frt. equald lb .14 - —
bgs., l.c.l., frt equald lb .15 - .16
Above prices are quoted f.o.b. works, freight equald, with Metropolitan New York and competitive producing points
Magnesium chloride, anhyd., 92%, flake or pebble, drms., c.l., works lb .12¼ —
drms., l.c.l., works lb .14 - .15
Hydrous, 99%, flake, bgs., c.l., works ton 55.00 - —
bgs., l.c.l., works ton 65.00 - 80.00
Magnesium gluconate, 100-lb. dm., f.o.b. works E lb. 1.42 —
Magnesium hydroxide, NF, powd., drms., 500-lbs. or more, f.o.b., works lb. .24½ .25½
Magnesium lauryl sulfate, drms., c.l., frt. alld lb. .22½ - —
drms., t.l.l., frt. alld lb. .23½ - —
tanks, frt. alld lb. .21½ - —
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more, works lb. .36 - —
pigs, 10,000-lb. lots or more, works lb. .35¼ - —
sticks, cs., works frt. alld. on carlots lb. .59 - —
Magnesium nitrate, cryst., drms., works lb. .29 - —
Magnesium oxide (see Magnesia, calcined).
Magnesium phosphate, tribasic, NF, bbls lb. .75 - —
Magnesium silicate (see Talc)
Magnesium silicofluoride, drms., works lb. .10½ .12
Magnesium sulfate, tech., bgs., c.l., works 100 lbs. 2.15 - —
bgs., l.c.l., works 100 lbs. 2.90 3.15
USP, cryst., bgs., c.l., works 100 lbs. 2.35 - —
bgs., l.c.l., 5,000 lbs., 1 withdrawal 100 lbs. 3.10 - —
bgs., smaller lots 100 lbs. 3.35 - —
Magnesium trisilicate, USP, fib. drms., 5,000-lb. lots lb. .38 - —
fib drms., 1,000-lb. lots lb. .40 - —
fib drms., 100-lb. lots lb. .45 - —
Bulky and super grades of magnesium trisilicate 7c per lb. higher.
Malachite green, straight, PTMA, bbls., works lb. 5.30 - —
Malathion, drms., c.l., works lb. .89 - —
drms., l.c.l., works lb. .92 - 1.01
Maleic acid, cryst., powd., drms lb. .37¼ - —
Maleic anhydride, drms., c.l., frt. equald lb. .23½ - —
drms., l.c.l., frt. equald lb. .25 - —
tanks, dlvd., frt. equald lb. .22½ - —
Malic acid, tech., drms. lb. .50 - —
Mandelic acid, NF, drms., 1,000-lb. lots lb. 2.35 - —
drms., smaller lots lb. 2.40 - 2.50
Mandrake root, bls lb. .40 - —
Manganese acetate, drms., dlvd lb. .35 - —
Manganese borate, tech., fib drms. lb. .23½ - —
Manganese carbonate, chemical grade, 45% Mn, bgs., 20,000-lb. lots and more, works lb. .11 - .18
Manganese chloride, Cl, anhyd., drms., 20,000-lb. lots, works lb. .21¾ - —
smaller lots, works lb. .23¼ - —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net works ton 148.00 - —
40,000 to 99,999-lb. lots, paper bgs., same basis ton 144.50 - —
40,000 to 99,999-lb. lots, drms., same basis ton 152.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots $3 per ton higher.
Manganese gluconate, drms. lb. 1.84 - —
Manganese hydrate, drms., dlvd lb. .35 - —
Manganese hypophosphite, NF, drms. lb. 3.52 - —
Manganese linoleate, liq., 4.35% Mn., drms lb. .35¼ - —
Solid, precip., 8.2% Mn., bbls lb. .41¼ - —
Manganese metal, electrolytic, drms., c.l., dlvd. E. lb. .34 - —
drms., ton lots, dlvd E. lb. .36 - —
drms., smaller lots, dlvd. E. lb. .38 - —
Manganese naphthenate, liq., 6% Mn., drms., frt. alld lb. .29¼ - —
Manganese resinate, fused, 3½% Mn., drms lb. .29¼ - —
Precip., 6½-7% Mn., drms. lb. .37 - —

Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd S. E. ton 97.50 - —
bgs., l.c.l., dlvd S. E. ton 104.50 - —
Manganese tallate, 6% drms. lb. .26½ - —
Manila copal gum, C, bgs. lb .35 .39
DBB, bgs. lb .25 .28
DK, bgs. lb No stocks
DK, dust, bgs. lb. .14 Nom.
MA, soft, bgs. lb. .20 .24
WS, bgs. lb No stocks
Mannitol, com'l, fib drms., ton lots, works lb .60 - —
fib drms., to ton lots, works lb .62 - —
fib drms., single drm., works lb .65 - —
Marine pitch, drms lb. .04¼ - .05
MBTS (see Mercaptobenzothiazyl disulfide)
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works lb. .27½ - —
bgs., l.c.l., works lb. .29 - —
Menadione USP, bots gram. .044 .05
Menhaden oil, crude, tanks, works, Atl. & Gulf lb. .07 - —
Menthol, nat., USP, Brazilian, large crystals, cs. lb. 8.35 - 8.40
Nat., USP, Brazilian, regular crystals, cs. lb. 8.25 - —
Japanese, cs. lb. 10.50 -12.00
Syn., USP, racemic, cns lb 4.50 —
2-Mercaptobenzothiazole, bgs., fib. drms., ton lots, works, frt. alld lb. .44 - —
bgs., fib drms., less ton lots, same basis lb. .46 - —
Mercaptobenzothiazyl disulfide, bgs., fib drms., ton lots, works, frt. alld lb. .54 - —
bgs., fib drms., less ton lots, same basis lb. .56 - —

## Lithol Rubine Red Toner—Methapyrilene Hydrochloride

Mercuric chloride, NF, cryst., drms., 50-lb. lots or more lb. 4.98 - —
USP, gran. or powd., 50-lb. dm., 100 lbs., f.o.b. works lb. 4.78 - —
Mercuric cyanide, NF, VIII, powd., fib drms lb 6.84 - —
Mercuric iodide, red, NF, 100-lb. dm., f.o.b. works lb. 7.72 - —
Mercuric oxide, red, NF IX, 50-lb. dm., 100 lbs., f.o.b. works lb 5.97 - —
tech., 50-lb. dm., 100 lbs., same basis lb. 5.77 - —
Mercuric oxide, yellow, NF, 50-lb. dm., 100 lbs., same basis lb. 6.14 - —
tech., bbls., 1,000-lb. lots lb 5.58 - —
bbls., smaller lots lb 5.60 - —
Mercurous chloride (see Calomel)
Mercurous iodide, yellow, NF, 100-lb. dm., f.o.b. works lb. 8.22 - —
Mercury, ammoniated (see White precipitate, USP XV)
Mercury, metal, 76 lbs. per flask, net flask 211.00 -214.00
Mesityl oxide, drms., c.l., dlvd. lb. .15 - —
drms., l.c.l., dlvd. lb. .16½ - —
tanks, dlvd. lb. .12½ - —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid, drms., works lb 57 75
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline)
Metaphenylenediamine (see m-Phenylenediamine)
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4-tolylenediamine).
Methacrylic acid, glacial, 98%, drms., truckloads, frt. equald lb. .42½ - —
drms., smaller lots, frt. equald, lb. .43 - .75
tanks, works, frt. equald lb. .40 - —
Methanol, nat., denaturing grade, tanks, frt. alld gal .85 - —
Syn., zone 1, drms., c.l. or t.l. min., dlvd gal. .51½ —
drms., l.c.l., dlvd gal. .61½ —
tankwagon, 2,000-4,000 gal. lots, dlvd Metropolitan area gal. .35 - —
tankwagon, 4,000 gal. min., dlvd gal. .30 - —
tankwagon, 4,000 gal. min., f.o.b. terminal gal. .29 - —
Syn., zone 2, drms., c.l. or t.l., min., frt. alld or dlvd gal. .55½ - —
drms., l.c.l., works gal. .65½ —
tankwagon, 2,000-4,000 gal. lots, min., dlvd., Metropolitan area gal. .39 - —
tanks, 4,000 gal. min. dlvd. gal. .34 - —
Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
Methapyrilene fumarate, 100-999 lbs., drms., f.o.b. works, frt. equald lb. 21.75 - —
Methapyrilene hydrochloride, 100-999 lbs., drms., f.o.b. works, frt. equald lb. 27.25 - —


*quality...uniformity...dependable service*




PURE California cold pressed lemon oil produced under continuous scientific quality control . . . bulk blended for uniformity, from desert and coastal grown lemons . . . packaged in tamper-proof containers for your protection . . . and priced to save you money. Our research and laboratory facilities have helped many users with product improvement and cost reduction...perhaps we can help you.

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**417 Rosehill Place, Elizabeth 2, New Jersey**

**Ventura Processors, 2325 Vista Del Mar Drive, Ventura, California**

Methenamine (see Hexamethylenetetramine).
Methionine hydroxyanalogue, (calcium salt) 90% min., dms., t.l., frt. alld. ... lb. 1.10 - —
dms., t.l., same basis ..... lb. 1.16 - —
dl-Methionine, fib dms., frt. alld., 50-lb. or more lb. 3.50 - —
Feed grade 98%, fib. dms., same basis lb. 1.55 - —
Methoxychlor, 50% wettable powder, dealers, dms., cs.. lb. .66 - —
Methyl abietate non-ret dms., c.l., dlvd. zone 1 lb. .21½ —
non-ret dms. t.c.l., same basis lb. .22 - .22½
Methyl abietate, hydrogenated, non-ret. dms., c.l., dlvd zone 1 lb. .23½ —
non-ret dms., t.c.l. same basis, lb. .24 - .24½
Zone 1 includes New England and Middle Atlantic states, Va., W Va., N C., Ohio., Ky., Mich., Ind. Ill., Wis., St Paul and Minneapolis, Minn; St Louis, Mo.; Miss., Ala., Ga., Fla., S C. and Tenn
Methyl acetone, nat., dms., t.c.l., E. of Miss., frt. alld gal. .62½ - —
Syn., dms., c.l., frt. alld E gal. .63 - —
dms., t.c.l., frt alld E. gal. .76 - —
tanks, frt. alld. E. gal. .51 - —
Synthetic methyl acetone E territory comprises all states East of and including Colo., Mont., N Mex. and Wyo. West territory is made up of all states west of those four.
Methyl acrylate dms., c.l., t.l. dlvd. lb. .39 - —
dms., t.l., dlvd. lb. .40 - —
tanks, dlvd. lb. .37 - —
Methyl alcohol (see Methanol)
Methyl amyl acetate, dms. c.l., dlvd E lb. .17 - —
dms., t.c.l., dlvd. E. lb. .18½ - —
tanks, dlvd E. lb. .14½ - —
Methyl amyl alcohol, dms., c.l., dlvd. lb. .17 - —
dms., t.c.l., dlvd. lb. .18½ - —
tanks, dlvd. lb. .14½ - —
Methyl amyl ketone, dms. works. lb. 1.05 - —
N-Methylaniline tech. tanks frt alld lb. .60 - —
Methylanthranilate, cns. ..... lb. 2.45 - 3.00
Methyl benzoate cns., dms. ... lb. .60 - .75
Methyl bromide, service organization prices 40 to 375-lb. cyls., large lots, frt. allo lb. .62 .6[illegible]
Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb bgs., c.l., works lb. .83 - —
50-lb. bgs., 2,000-lb lots and more, same basis lb. .89 - —
50-lb bgs. smaller lots, frt. alld on 100 lbs lb 1.05 - —
Standard vis. (15,400 cps.) 50-lb. bgs. c.l., frt. alld lb. .63 - —
50-lb bgs., 2,000-lb lots and more, same basis lb. 76 - —
50-lb bgs. smaller lots, frt alld. on 100 lbs lb. 79 - 81
Methyl chloride, indust., cyls., frt. equald lb. .22¼ -
tanks, multi-unit, same basis, lb. .16¼ -
tanks, single unit, same basis, lb. .12¾ - —
Methyl chloride, refrigerator nitrs cyls. dlvd lb. .48¾ - —
other consumers or service men, cyls. dlvd lb. .67¼ - —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, cns lb 1.55 1.80
Methyl ethyl ketone, dms., c.l., dlvd lb 15 —
dms., t.c.l., dlvd lb 16½ —
tanks, dlvd. lb 12½ —
3-Methyl-5-ethyl pyridine dms., c.l., works lb 45 —
dms., t.c.l., works lb 45¾ —
tanks, works lb. 43 —
Methyl formate, refd., dms. lb. .35 .40
Tech., non-ret dms., any quantity works lb 10 —
tanks, works lb. 07 - —
a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works lb. 21 - —
100-lb. multiwall paper bgs., t.l., min. 23,000 lbs., works lb. 21½ —
100-lb. multiwall paper bgs., t.l., works lb. .23 - —
Methyl heptin carbonate 90% to 28.00 31.00
Methyl p-hydroxybenzoate fib dms. lb 1.90 2.00
Methyl ionone, standard, cns. dms. lb 3.40 3.85
Methyl isobutyl carbinol (see Methyl amyl alcohol).
Methyl isobutyl ketone, dms., c.l., dlvd lb. .17 —
dms., t.c.l., dlvd lb. .18½ —
tanks, dlvd. lb. .14½ —
Methyl methacrylate, dms., c.l., t.l., frt equald with Belle, W Va lb. .31 —
dms., smaller lots, same basis lb. .31½ —
tanks, same basis lb. 29 —
Methyl naphthyl ketone, cryst., cns lb 2.45 4.30
Methyl parahydroxybenzoate (see Methyl p-Hydroxybenzoate)
Methyl parathion tech. 80% dms., frt. alld E lb. .84 - —
Methyl parathion prices 2c. per lb. higher in West.
Methyl roseaniline chloride, fib., 5-lb fib dms. lb 6.90 - —
Methyl salicylate, dms. t.l., frt. alld lb 60¼ —
dms., t.c.l., same basis lb 62½ .67½
Methyl testosterone USP 100-gram bots gram No Prices.
2-Methyl-5-vinyl pyridine, 40-dm. lots or more, f.o.b. works lb. 1.30 - —
5-39-dm. lots, same basis .... lb. 1.35 - —
tanks, same basis ..... lb. 1.25 - —
Methyl violet toner, molybdated, PMA, bbls., dlvd. E of Rockies lb 2.80 - —
Tungstated, PTMA, bbls., same basis lb. 4.35 - —
Methyl violet prices 1c higher W of Rockies.
Methylene blue, fib. dms., 100-lb. lots, frt. adjusted lb 3.25 - —
Methylene chloride, tech., straight or assorted, dms., c.l., or t.l dlvd lb. .13½ - —
dms., t.c.l. t.l. dlvd lb. .15¾ - —
tanks, 4,000-gal. min., dlvd. lb. .12¼ - —
tanktrucks, 1,000-gal. min., dlvd. lb. .13¼ - —
b-Methylnaphthalene, 32° C., m.p., dms., works lb. 90 - —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-phenyl-3-methylpyrazolone-5).

Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint, plastic, 100 mesh, bgs. c.l., works lb. .04 - —
roofing, 20 to 80 mesh, works lb. .03 - —
Mica, wet-grd., biotite bgs., c.l., works, frt. alld. E lb. .06½ - —
bgs. t.c.l. ex whse. ..... lb. .07¼ - —
paint or lacq., bgs., c.l., 325 mesh, works frt. alld E. lb. .08¼ - —
bgs., t.c.l., ex-whse. or freight alld. E lb. .09 - —
rubber bgs., c.l., works, frt. alld. E lb. .08 - —
bgs., t.c.l., ex-whse or frt. alld. E lb .08¾ - —
wallpaper bgs., c.l., works, frt. alld. E lb. .08¾ - —
bgs., ex-whse, or frt. alld. E lb. .09 - —
white, 5-10 microns, bgs., c.l., works, frt. alld. E lb. .08¼ - —
Mica, wet-grd. W of Miss ½c higher; W of Rockies 1c. higher.
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 - .11
laminating grades, tankcars, works lb. .11 - .12
Mineral black, bgs., works lb. .0160- .0670
Mineral oil, white tech. 50-65 vis., non-ret. dms., c.l., f.o.b. refy gal. .65 - —
50-65 vis., non-ret. dms., t.c.l., basis gal. .70 - —
tankcars, refy. ..... gal. .49 - —
65-75 vis., non-ret. dms., c.l., same basis gal. .65 - —
non-ret. dms., t.c.l., same basis gal. .70 - —
tankcars, refy. ..... gal. .49 - —
NF, 80-90° vis., non-ret. dms., c.l., same basis gal. .66 - —
non-ret. dms., t.c.l., same basis gal. .71 - —
tankcars, refy. ..... gal. .50 - —
NF, 135-138 vis., non-ret. dms., c.l., same basis gal. .72 - —
non-ret. dms., t.c.l., same basis gal. .77 - —
tankcars, refy. ..... gal. .56 - —
NF, 145-155 vis., non-ret. dms., c.l., same basis gal. .78 - —
non-ret. dms., t.c.l., same basis gal. .83 - —
tankcars, refy. ..... gal. .62 - —
USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .80½ - —
non-ret. dms., t.c.l., same basis gal. .85½ - —
tankcars, refy. ..... gal. .64½ - —
USP, 200-210 vis., non-ret. dms., c.l., f.o.b. refy gal. .82½ - —
non-ret. dms., t.c.l. ..... gal. .87½ - —
tankcars, refy. ..... gal. .66½ - —
USP, 340-350 vis., non-ret. dms., c.l., f.o.b. refy gal. .87½ - —
non-ret. dms., t.c.l. ..... gal. .92½ - —
tankcars, refy. ..... gal. .71½ - —
(For f.o.b. N. Y. add 2c. for tankcars, 2c. for c.l. and 3c. for t.c.l. non-ret. dms.)
Mineral orange, American nbis., c.l., works lb. .1550- —
bbls., c.l., same basis lo. .1650- —
Mineral spirits, petroleum, odorless, tankcars, New Jersey gal. .29 - —
New York ..... gal. .205 - —
Houston, Texas ..... gal. .25 - —
regular, tankcars, New Jersey and New York .... gal. .18 - —
Group 3 ..... gal. .12875- —
Houston, Texas ..... gal. .145 - —
Mink oil, dms..... lb. 2.75 - —
Mirbane oil (see Nitrobenzene)
MNPT maroon toner, kgs., c.l., works lb 6.30 - —
Molasses, blackstrap, teco grade tanks, New Orleans g.l. .09¼- .09½
tanks, New York ..... gal. .13½- —
Molybdated orange, bbls. ..... lb. .49 - —
Molybdenum metal, powd., 80 or 200 mesh, ctns., works kilo 7.84 - —
325 mesh ctns., works kilo 9.13 - —
Molybdenum trioxide purif., dms., works lb 1.15 - —
Tech. chemical dms. works, basis Mo content lb 1.48 - —
Tech., metallurgical, dms., works, basis Mo. content lb. 1.47 - —
Molybdic acid, 85%, dms. works lb 1.05 1.15
Monoallylamine, dms., c.l., dlvd lb. .965 —
dms., c.l., dlvd. ..... lb. .995 - —
tanks, dlvd. ..... lb. .98 - —
Monoanhydrotrimine, dms., c.l., dlvd E. of Rockies lb. .57½ - —
dms., t.c.l., same basis lb. .59 - —
tanks, same basis lb. .55 - —
Mono-tert-butyl-m-cresol, dms., c.l., works lb. .55 - —
dms., t.c.l., works lb. .56 - —
tanks, works lb. .54 - —
Monochloracetic acid, purif. (see Chloroacetic acid, mono)
Monochlorobenzene, dms., c.l., frt. alld or dlvd E lb. .10½ —
dms., t.c.l., same basis lb. .11½ —
tanks, same basis lb. .08¾ —
Monoethanolamine dms. c.l. dlvd. E lb 27½ —
dms., t.c.l., same basis lb. .29 - —
tanks, same basis lb 25 - —
Monoethylaipnanaphthylamine (see N-Ethyl-a-naphthylamine).
Monoethylamine, 70% aqueous, solution, dms., c.l., dlvd E. 100% basis lb. 38½- —
dms., t.c.l. dlvd E 100% basis lb 40 - —
tanks, dlvd. E., 100% basis lb. .35 - —
Monoethylaniline (see N-Ethylaniline).
Monoethylorthotoluidine (see N-Ethyl-o-toluidine).
Monoisopropanolamine, dms. c.l., d'vd E lb. .27½- —
dms., t.c.l., same basis lb. .29 - —
tanks, same basis lb 25 - —
Monoisopropylamine, anhyd., dms., c.l., dlvd lb. .33½- —
dms., t.c.l. same basis lb. .35 - —
tanks, same basis lb. .31 - —
Monomethylamine, anhyd., cyls., t.c.l. frt. equald., 100% basis lb 20 - —
tanks, 100% basis lb. .26 - —
30-33% soln., dms., c.l., frt. equald., 100% basis lb. .36 - —
dms., t.c.l., frt. equald., 100% basis lb. .36½- —
tanks, frt. equald. 100% basis, lb 26 - —
40% soln., dms., frt. equald., 100% basis lb. .33 - —
dms., t.c.l., frt. equald., 100% basis lb. .33½- —
tanks, frt. equald, 100% basis lb. .26 - —

Monopentaerythritol, tech., bgs., c.l., dlvd. E lb. .31 - —
bgs., t.c.l., dlvd. E..... lb. .32 - —
Monopotassium glutamate, dms., 1,000-lb. lots, frt. alld lb. 3.05 - —
dms. 100-lb lots, same basis ... lb. 3.25 - —
Monosodium glutamate, dms., 100 lbs., dlvd. lb. 1.00 - 1.15
Monosodium phosphate (see sodium phosphate, monobasic).
Montan wax, Calif., refd., bgs lb. .27 - .28
imp., crude, Bohemian, bgs... lb. .22 - .24
German, bgs ..... lb. .26 - .27
Morphine, cns., 100-oz., f.o.b. works, oz. 12.35 - —
Morphine hydrobromide, cns., 100-oz., f.o.b. works oz. 9.90 - —
Morphine hydrochloride, NF, cns., 100-oz., f.o.b. works oz. 9.90 - —
Morphine sulfate, USP, cns., 100-oz., f.o.b. works oz. 9.90 - —
Morpholine, dms., c.l., dlvd. E lb. .55¼- —
dms., t.c.l., dlvd. E. ..... lb. .56¼- —
tanks, dlvd. E. ..... lb. .52¾- —
Muriatic acid (see Hydrochloric acid).
Musk, syn., ambrette, fib. dms., 100-lb. lots lb 4.40 - 4.90
cns., 25-lb lots ..... lb. 4.50 - 5.00
Ketone, fib. dms., 100-lb. lots lb 4.60 - 5.10
cns. 25-lb. lots lb 4.70 - 5.20
Xylol, fib. dms., 100-lb. lots lb. 1.26 - —
cns., 25-lb. lots ..... lb. 1.40 - —
Mustard seed, Danish yellow, bgs. lb. .11½- —
Montana, yellow, bgs ..... lb. .10½- —
Oriental, bgs. ..... lb. .08 - —
Mustard oil, syn bots. ..... lb 1.60 1.85
Myristic acid, bgs..... lb. .31 - .33
tanks ..... lb. .30½- .32
Myrrh gum, cs..... lb. .55 - —

## N

Naphtha, high solvency (see Solvent naphtha, petroleum)
Naphtha, petroleum, cleaner's (see Cleaner's naphtha).
Naphtha, VM&P, petroleum, tankcars, New Jersey and New York ..... gal. .19 - —
Group 3 ..... gal. .13875- —
Houston, Texas ..... gal. .155 - —
Naphthalene crude, dom., 74°, tanks, frt equald lb. .04¼- —
78° tanks, same basis lb. .05 - —
imp., 78°, bgs., large lots lb. .09½ Nom.
Refd., indust., chipped, crushed, bgs., frt. equald ..... lb. .12½- —
tanks, same basis lb. .09¾- —
Refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis lb. .15½- —
cs. 50 lbs. c.l. same basis, lb. .15¾- —
1-lb pkgs., c.l., same basis, lb. .18½- —
a-Naphthol, dms., frt. alld. ..... lb. 1.00 - —
b-Naphthol, tech., flake, bbls., c.l., works lb. .33 - —
bbls., t.c.l., works ..... lb. .35 - —
Naphthol, ITR, red toner, bbls., works lb. 5.00 - —
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid).
1-Naphthol-4 sulfonic acid (see Neville and Winther's acid).
1-Naphthol-5-sulfonic acid (see L acid).
1-Naphthol-5-sulfonic 8-amino acid (see S acid).
2-Naphthol-6,8-disulfonic acid (see Gamma acid)
Naphthol sulfonic mixed acid (see Cleve's acid).
a-Naphthylamine, dms., frt. alld lb. .50 - —
b-Naphthylamine tech. flake, bbls., works lb. 1.60 - —
1-Naphthylamine-5-sulfonic acid (see Laurent's acid).
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).
2-Naphthylamine-1-sulfonic acid (see Tobias acid).
2-Naphthylamine-6-sulfonic acid (see Broenner's acid).
2-Naphthylamine-7-sulfonic acid (see F acid).
Naringin, fib dms ..... lb. 8.50 - -
Neatsfoot oil, 15° cold test, dms. lb. .29 Nom.
20° cold test, dms..... lb. .28 Nom.
30° cold test, dms..... lb. .27 Nom.
Neocinchophen, USP dms., frt. adjusted lb. 7.00 8.00
Neomycin sulfate, fib. dms., 1-kilo basis activity gram. .25 - —
fib. dms., 100-999-gram lots, basis activity gram. .30 - —
Tech., fib. dms ..... gram. .13½- —
Neopentylglycol, dms., c.l., dlvd. lb. .32 - —
dms., t.c.l., same basis ..... lb. .33 - —
Neroli oil, NF, French, bots. .... lb. 425.00 -575.00
Tunisian, bots. ..... lb. 400.00 —
Nerolin, cns. ..... lb. 2.45 - 2.85
Neville and Winther's acid, dms., frt. alld lb. 1.30 - —
Niacinamide (see Nicotinamide).
Nickel acetate bbls. dlvd ..... lb. .68½- .75½
Nickel carbonate, bbls. dlvd ... lb. .78¼- .85¼
Nickel chloride bbls. dlvd .... lb. .37 - .45
Nickel formate bbls., ton lots, frt. alld lb. 72 - .73
Nickel metal, electro cathodes, cs., works lb. 74 - —
Nickel nitrate, dms., frt. alld ... lb. .31½- .33½
Nickel oxide, black, bbls ..... lb. .85 - —
Green, bbls. ..... lb. .84 - —
Nickel sulfate, bgs. c.l. dlvd ... lb. .28 - —
bgs., t.c.l., dlvd ..... lb. .28½- .30
Nicotinamide, USP 50-kilo dm., frt. adjusted kilo 8.00 - —
Nicotinamide hydrochloride, dms., frt. adjusted kilo 8.00 - —
Nicotine sulfate 40% dealers, 50-lb. dms. frt. alld lb. 1.20 - —
40% manufacturers, 500-lb. dms., frt. alld lb 1.05 - —
Nicotinic amide USP (see Nicotinamide).
Niger seed, bgs ..... lb. .10¼- —
Niketh amide cbys ..... lb. 5.00 - —
Nitric acid, 36° Be., cbys., c.l., works E. 100 lbs 5.75 - —
cbys., t.c.l. works E 100 lbs. 6.05 6.85
38° Be., cbys., c.l., works E. 100 lbs. 6.25 - —
cbys., t.c.l., works E. 100 lbs 6.55 - 7.35
40° Be., cbys., c.l., works, E. 100 lbs. 6.75 - —
cbys., t.c.l., works, E. 100 lbs. 7.05 - 7.85
42° Be., cbys., c.l., works, E. 100 lbs. 7.25 - —
cbys. t.c.l. works E .. 100 lbs. 7.55 8.35
58.5 to 68%, $HNO_3$, tanks, works, 100% basis 100 lbs. 3.90 - —
94½ to 95½% $HNO_3$, tanks, works, 100% basis 100 lbs. 4.90 - —
CP, NF, consumer, cbys., extra, c.l., works lb. .18½- —
cbys. extra, t.c.l., works, lb. .20 - —
5-pint bots., extra, cs., c.l., same basis lb. .22½- —
5-pint bots. extra cs., t.c.l., same basis lb. .24 - .25

4-Nitro-2-aminophenol, tech., paste, dms., frt. alld lb. .90 - —
m-Nitroaniline, cryst., dms., frt. alld. lb. 1.15 - —
Paste, dms., frt. alld., 100% basis, lb. 1.10 - —
o-Nitroaniline, flaked, dms. t.l., frt. alld lb. .49 - —
dms., t.l.l. frt. alld ..... lb. .51 - —
o-Nitroaniline orange toner, kegs, lb. 1.35 - —
p-Nitroaniline, dms. frt. alld... lb. .445 - —
o-Nitroanisole, tech., tanks, frt. alld. lb. .36 - —
p-Nitroanisole, tech., solid, dms., frt. alld lb. .72 - —
Nitrobenzene, dbl. dist., dms., c.l., frt. alld. lb. .13 - —
dms., t.c.l., frt. alld..... lb. .14 - —
tanks, frt. alld..... lb. .11 - —
p-Nitrobenzoic acid, dms., c.l., works lb. .63 - —
dms., t.c.l., works ..... lb. .64 - —
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175 seconds, bbls., c.l., works lb. .37½- —
bbls., t.c.l., same basis lb. .33½- .40¼
18-20, cps., bbls. c.l., same basis lb. .39½- —
bbls., t.c.l. same basis lb. .40½- .42½
250-400, 600-1,000 seconds, bbls., t.c.l., same basis..... lb. .43 - .46
Spirit soluble, 30-35 cps., ¼, ½ seconds, bbls, c.l., same basis lb. .43 - —
bbls., t.c.l., same basis lb. .44 - .46
5-6 cps., 40-60 seconds, bbls., c.l., same basis lb. .42 - —
bbls. t.c.l. same basis .... lb. .43 - .45
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.
o-Nitrochlorobenzene, dms. c.l., frt. alld lb. .15 - —
dms., t.c.l., same basis..... lb. .16 - —
tanks, same basis ..... lb. .13 - —
p-Nitrochlorobenzene, dms. .... lb. .26 - .27
2-Nitro-p-cresol, tech., dms., dlvd. lb. .88 - —
Nitroethane, dms., c.l., dlvd. E lb. .25 - —
dms., t.c.l., dlvd E ..... lb. .26½- —
tanks, dlvd. E ..... lb. .22½- —
Nitroethane prices West of Rockies are 1c. higher.
Nitrogen solutions, tanks, frt. equald., N unit. 1.28 - —
Nitrogen tetroxide, indust., tankcars, f.o.b. Hopewell, Va lb. .065 - —
Clys., t.l., min. 5 tons, same basis lb. .07½- —
Cyls., t.c.l., t.l.l., same basis lb. .15 - —
Nitrogenous process tankage, bulk, works, unit-ton. 4.50 - 5.00
Nitrogenous sewage sludge, bulk, f.o.b. Chicago, works, unit-ton. 3.50 - .50
Nitromethane, dms. t.l., dlvd. E lb. .25 - —
dms. t.l.l. dlvd E ..... lb. .26½- —
Nitromethane prices West of Rockies are 1c. higher.
a-Nitronaphthalene, bbls. frt. alld. lb. .31 - —
o-Nitrophenol, dms., works, frt. equald lb. .84 - —
p-Nitrophenol, dms., c.l., frt. alld. lb. .45 - —
dms., t.c.l., frt. alld ..... lb. .47 - —
1-Nitropropane, dms., c.l., frt. alld. E. of Rockies lb. .23½- —
dms., t.c.l., same basis ..... lb. .25 - —
tanks, same basis ..... lb. .21 - —
2-Nitropropane dms., c.l., frt. alld. E. of Rockies lb. .18½- —
dms., t.c.l., same basis ..... lb. .20 - —
tanks, same basis ..... lb. .16 - —
Nitropropane prices West of Rockies are 1c. per lb. higher.
m-Nitrotoluene, tech., dms. frt. alld. lb. .50 - —
o-Nitrotoluene, dms., c.l., frt. alld. lb. .15 - —
dms., t.c.l., frt. alld. ..... lb. .16 - —
tanks, frt. alld ..... lb. .13 - —
p-Nitrotoluene, tech., cast, dms., c.l., works lb. .27½- —
dms., t.c.l., works ..... lb. .28 - —
flake, dms., c.l., t.l., works, lb. .27½- —
dms., t.c.l., works..... lb. .28 - —
m-Nitro-p-toluidine, dms. ..... lb. 1.25 - —
Nonylphenol, dms., c.l., frt. alld. lb. .22 - —
dms., t.c.l. frt. alld ..... lb. .23 - —
tanks, frt. alld ..... lb. .19½- —
Nonylphenol prices on shipments to Western States are 2c. higher.
Nutmegs, East Indian, whole, bgs. lb. 1.36 - —
West Indian, bgs ..... lb. 1.45 - —
Nutmeg oil, USP, dist., East Indian, cns lb. 9.50 -12.75
West Indian, cns ..... lb. 9.50 -12.75
Nux vomica, bls ..... lb. .20 - —
Powd., bbls., bxs..... lb. .20 - .22

## O

Ocher (see Iron oxide yellow, nat.).
Ocotea cymbarum oil, dms..... lb. .48 - .55
Octane, indust., tanks, Bayonne, N.J gal. .20 - —
Borger Tex. ..... gal. .15¾- —
1-Octanol, tech., dms., c.l., dlvd., Zone 1 lb. .43½- —
dms., t.c.l., dlvd. Zone 1 lb. .45½- —
tanks, dlvd., Zone 1..... lb. .41 - —
Octyl alcohol, perfumers' grade, bots lb. 1.60 - 3.25
Octyl alcohol, tech, (see 1-Octanol, tech)
tert-Octylamine, dms., c.l., t.l., f.o.b. works lb. .54½- —
dms., t.c.l., same basis..... lb. .55 - —
Octyl phenol, bgs., c.l., works lb. .22 - —
bgs., t.c.l., works ..... lb. .22½- —
tanks, works ..... lb. .21 - —
Octyl phenol in dms, 1lc. higher

**OILS**

**Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.**

Oiticica oil, liq., dms. ..... lb. .20 - .20¼
tanks ..... lb. .18 - .18¼
Oleic acid, dbl.-dist. (white), dms. lb. .17½- .20
tanks ..... lb. .15 - —
S. d., dms..... lb. .16¼- .18¾
tanks ..... lb. .13¾- —
Oleo oil, extra, dms. ..... lb. .13 - .13½
Oleostearine, dms. ..... lb. .12 - .12¼
Oleum (see Sulfuric acid, fuming)
Olibanum gum, siftings, cs. ..... lb. .13 - .20
Tears, cs. ..... lb .22 - .30
Olibanum oil, bots. ..... lb 5.00 7.65
Extra fine, bots ..... lb 8.00 9.50
Olive oil, edible, dms, spot, duty-paid gal. 2.30 - 2.35
Olivine, crude works..... ton 12.00 —
20 mesh, works ..... ton 15.00 - —
100 mesh works..... ton 20.00 - —

# FIVE GRADES FIVE SPECIFIC USES

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*Bulk neomycin sulfate delivered at advanced production points . . . reducing your processing costs.*

| | |
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| SUPER WHITE | the newest, whitest, finest grade neomycin sulfate available. Designed for maximum elegance—particularly for use in injectables and ophthalmic solutions. |
| GRANULAR | specific for tablet manufacture. Free-flowing and easily compressed without adding lubricants or diluents. |
| TECHNICAL GRADE | especially prepared for use in creams, ointments, lotions and other products of the cosmetics industry. |
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AMERICAN CYANAMID COMPANY, Fine Chemicals Dept.
30 Rockefeller Plaza, New York 20, N. Y.

Opium gum, USP, cns., 25-lbs., f.o.b. works oz.19.20 - —
gran., cns., 50 lbs., same basis. oz.21.65 - —
powd., cns., 50 lbs., same basis. oz.21.65 - —
Orange oil expressed USP, Brazilian cns. dms lb No stocks.
California, cns., dms. lb. .70 - .90
Florida, cns., dms. lb. .50 - .60
Messina cns lb 4.25 5.00
West Indian bitter cns. dms lb 2.50 3.25
Sweet, dist., cns. dms lb .60 —
Orange peel, bitter, Haitian, bls lb. .18 - .20
Sweet lb. .28 - .30
Origanum oil Spanish cns lb 1.80 2.30

**ORANGE PIGMENTS**

**Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.**

Orris root Florentine, bls. lb 55 —
powd. bbls. bxs. lb 65 - —
Verona bls. lb 35 - —
powd. bbls. bxs lb 45 - —
Orthoanisidine (see o-Anisidine).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde)
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid (see o-Chlorobenzoic acid).
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline)
Orthochlorophenol (see o-Chlorophenol)
Orthocresol (see o-Cresol)
Orthocresotinic acid (see 2,3-Creosotic acid)
Orthodichlorobenzene (see o-Dichlorobenzene)
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene)
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine)
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary amylphenol (see o-tert-Amylphenol)
Orthotolidine (see o-Tolidine base).
Orthotoluidine (see o-Toluidine).
Ouabain USP bots., gram 3.00 4.00
Ouricury wax, crude, bgs lb. .60 - .61
Refd., pure, bgs. lb. .63 - .69
Oxalic acid, bgs. dms. c.l., works. lb. .18 18½
bgs. dms. 10,000-lb lots, works. lb. .18¼ .18¾
bgs. dms. smaller lots, works. lb. 19¼ 19¾
b-Oxynaphthoic acid, pigment manufacture, dms., frt. alld. lb. .912 - —
Dyestuff manufacture, dms., same basis lb. 1.03 - 1.14
Oxyquinolin sulfate, cns., 100 lb lots, works, lb 4.75 5.00
cns., smaller lots, works lb 4.92 5.17

# P

Palm oil, clarif., dms. lb. .1450- .1550
tanks lb. .1165- —
Palm oil acid, dist., dms. lb. 15¾ 19¼
tanks lb. 13¾ 14¼
Palmarosa oil, cns. lb. 4.45 - 6.00
Papain, powd., bots lb. 5.50 - 13.00
Papaverine hydrochloride, nat. or syn. USP cns. 25-oz. to 100-oz. lots oz 5.00 —
cns., smaller lots oz 5.05 5.20
Papaverine sulfate nat. or syn., USP, cns., oz. 7.10 7.35
Paprika, Bulgarian bgs lb .34 .35
Hungarian, bgs. lb. .32 —
Spanish, bgs. lb. .50 —
Yugoslavian, bgs lb .34 —
Para-aminobenzoic acid (see p-Aminobenzoic acid)
Parachlorobenzoic acid (see p-Chlorobenzoic acid).
Paramethylphenylcinchonic acid (see Neocinchophen)
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine m-sulfonic acid)
Para-aminophenol (see p-Aminophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2-nitroaniline)
Para-anisidin (see p-Ansidine).
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner, red, bbls lb. 1.36 - —
Chlorinated, kgs. lb. 1.35 - —
Paraffin, crude, scale, white, 123°-127°F. ASTM, tanks, refy. lb. .0655- —
Paraffin, fully refd., 122°-124°F, ASTM., tanks, refy lb. .0765- —
125°-127°F. ASTM, tanks, refy. lb. .0765- —
130°-132°F, ASTM, tanks, refy. lb. .0765- —
132°-134°F., ASTM tanks, refy. lb. .0765- —
135°-137°F., ASTM, tanks, refy lb. .0765- —
AMP temperatures are an arbitrary 3°F higher than ASTM.
Paraffin oil, pale, 100-110 vis., at 100°F., tanks, east coast refy. gal. .14 —
Paraffin wax (see Paraffin).
Paraformaldehyde 91%, flake, bgs., c.l., frt. alld lb. .10 - —
bgs., l.c.l., frt. alld lb. .12 - .13
91%, powd., bgs., c.l., ex whse. lb. .1715- —
bgs., l.c.l., ex whse lb. .1865- —
USP-X, fib dms., c.l. lb. .19 - —
fib dms., 1,000-lb. lots lb. .20 - —
fib. dms., smaller lots lb. .21½ - —
Paraldehyde, tech., 98%, 55-gal. dms., t.l., dlvd lb. .14 - —
55-gal. dms., l.c.l., dlvd lb. .15 - —
tanks, dlvd lb. .11½ — —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene)
Paranitrotoluene (see p-Nitrotoluene.
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine)
Paraphenylphenol (see p-Phenylphenol)
Para-tertiary amylphenol (see p-tert-Amylphenol)
Para-tertiary butylphenol (see p-tert-Butylphenol)
Parathion, ethyl, dms. frt. alld. lb. .84 - —
Parathion prices 2c per lb higher in West
Paratoluenesulfonamide (see p-Toluenesulfonamide)
Paris green dealers 100 lb. dms., frt. alld lb. .45 —
Passion flower herb, bls. lb. .45 .50
Patchouli oil, imp., cns. lb. 5.10 - 5.25
Peach kernel oil, USP (see Apricot kernel oil)
Peacock blue, fugitive, 100% color strength, 250-lb. bbls., dlvd. E. of Rockies lb. 1.00 - —
Peacock blue price 1c. higher W of Rockies.
Peanut meal, 45% old process, bgs., f.o.b., mills ton 64.00 Nom.
Peanut oil, crude, tanks, f.o.b. mills. lb. .15½- —
Refd., dms. lb. .20¾- .21
tanks lb. .18¾- —
Pectin, dom. NF citrus powd. bbls. lb 2.05 2.06
Dom., tech., powd., 150 jelly grade, bbls lb. 1.28 - —
Imp., Danish, bbls. ex whse lb. 1.28 - —
Pelargonic acid, dms., c.l., dlvd lb. .27½- —
ton lots, same basis lb. .23½- —
tanks, same basis lb. .25 - —
Penicillin potassium cryst., bulk, 1,000,000 units. .021 - .024
Penicillin procaine cryst., bulk, 1,000,000 units. .021 - .024
Pennyroyal oil USP imported cns. lb. 2.25 - 3.10
Pentachlorophenol, bgs., c.l., t.l., works, frt equald lb. .21 —
bgs., l.c.l., same basis lb. 22½ .29
Pentachlorophenol in dms 1c higher.
Pentaerythritol, tech., bgs., c.l., dlvd lb. .31 - —
bgs., l.c.l., dlvd lb. .32 - —
Pentaerythritol, di-and tri-isomers (see Dipentaerythritol and Tripentaerythritol)
Pentane, indust., tanks, Tex. refy. gal. .14 - —
Pentobarbital, dms. 100 lbs. or more lb 3.00 - —
Pepper, black, Malabar, bgs. lb. .53 - —
Lampong, bgs. lb. .55 - —
Red, Funtuas, bgs lb. .32 - —
Japanese, Hontoka, bgs lb. .37½- —
Santaka, bgs. lb. .31½- —
Sudanese, bgs. lb. .36 - —
White, Muntok, bgs lb. .93 - —
Peppermint leaves, dom. USP, bls., dms lb 70 75
Imp., USP., bls lb 85 —
Peppermint oil, nat., dms lb. 4.00 - 4.60
Redist., USP, dms. lb. 4.25 - 5.25
Perchloroethylene dms. c.l. or t.l., dlvd lb. .13½ — —
dms., l.c.l., dlvd lb. .15¼- —
tanks, dlvd. lb. .11¾- —
tanktruck, 1,000 gal. min. dlvd. lb. .12¼ — —
Peri acid, dry, bbls. frt. alld lb 1.60 - —
Paste, bbls. frt. alld lb 1.55 - —
Peru balsam, dms lb. 1.25 - 1.80
Persic oil, USP (see Apricot kernel oil).
Petitgrain oil South American cns. dms lb. 2.50 - 3.25
Petrolatum, cream dms. c.l. refy lb. .08125- —
dms., l.c.l. dlvd. lb .10125- 11375
tanks, refy lb .05875 —
Extra amber, dms., c.l., refy. lb. .07125- —
dms., l.c.l. dlvd. lb 09125 10375
tanks, refy lb 04875 —
Lily white, dms. c.l. refy lb. .08625 —
dms., l.c.l. dlvd. lb 10625 12
tanks, refy lb .06735 —
USP, snow white dms. c.l. refy lb. .09125- —
dms. l.c.l. dlvd lb. .11125- 125
tanks, refy lb .06875 —
USP, soft yellow, dms., c.l., refy. lb. .07125- —
dms., l.c.l. dlvd lb. .095 10375
tanks, refy lb. .04875- —
Petroleum pitch (see Asphalt petroleum)

**PETROLEUM PRODUCTS**

**Petroleum product quotations are listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.**

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms. c.l. works lb. .16½ .18¾
non-ret. dms. t.c.l. works lb. .17½ .19
tanks, works lb. .14½ .17
50-55%, sulfuric content, non-ret. dms., c.l., works lb. .16 - —
non-ret. dms. t.c.l. works lb. .17 - —
tanks, works lb. .13 - —
o-Phenetidine, dms. c.l. frt alld. E lb. .91 - —
dms., t.c.l., same basis lb. .93 - —
p-Phenetidine, dms., c.l., frt. alld. lb 1.05 - —
dms., same basis lb 1.08 - —
Phenobarbitol, USP, dms., 100-lbs., frt. alld lb. 3.25 - —
Phenobarbital-Sodium (see sodium phenobarbital).
Phenol, 90-92% (cresol 8-10%) non-ret. dms. frt alld. E of Rockies lb. .16¾- —
non-ret. dms. t.c.l. same basis. lb. .17¾- —
tanks, same basis lb. .14¾- —
82-84% (cresol 16-18%) non-ret. dms., c.l., same basis lb. .16½- —
non ret. dms., t.c.l., same basis. lb. .17½- —
tanks, same basis lb. .14½- —
30°C, or above, tar dist., non-ret. dms., c.l., same basis lb. .18 - —
non-ret. dms. t.c.l. same basis. lb. .19 - —
tanks, same basis lb. .16 - —
USP, syn., dms., c.l., t.l., frt. alld lb. .18½- —
dms., same basis lb. .20½- —
tanks, same basis lb. .16½- —
Phenolphthalein, USP or yellow, 250-lb. dm., 2,000 lbs. frt. alld. lb. 1.30 - —
250-lb. dm., same basis lb. 1.35 - —
Phenothiazine drench fib dms. t.l., dlvd lb. .44 - —
fib. dms., t.t.l., same basis lb. .47 - —
NF, fib. dms., t.l., same basis lb. .43 - —
fib. dms. t.t.l. same basis lb. .46 - —
Phenyl acetate, dms., 100-lb. lots, works lb. .50 - —
Phenyl salicylate (see Salol).
Phenylacetaldehyde, soln., 50%, bots lb. 2.35 - —
100%, bots. lb. 4.00 - 4.65
Phenylacetic acid, pure, cryst. cns. lb. 1.25 1.75
dl-Phenylalanine, dms. works lb. 27.00 - 37.50
l-Phenyl-3-carbethoxy pyrazolone-5, fib. dms. 200-lb lots dlvd E. lb. 3.45 - —
fib. dms., smaller lots, dlvd E lb 3.80 - —
N-Phenyldiethanolamine dms. c.l., dlvd E lb. .41 - —
dms., t.c.l., dlvd E lb. .42½- —
tanks, dlvd. E lb. .38½- —
m-Phenylenediamine, dms., frt. alld. lb. 1.10 - —
o-Phenylenediamine, coml., fib. dms., 100 to 1,000 lbs., works lb. 1.70 - 1.80
p-Phenylenediamine, tech., dms., works lb. 1.55 - —
Phenylethanolamine, dms., c.l., works lb. .75½- —
dms. t.c.l., same basis lb. .77 - —
Phenylethyl acetate bots. lb. 1.25 - 1.40
2-Phenylethyl alcohol, extra, dms. lb. 1.14 - 1.50
Standard, dms lb. 1.10 - 1.60
b-Phenylethylamine, dms., 20,000 lbs. or more frt. alld lb. 1.50 - —
dms., smaller lots, frt. alld lb. 1.70 - 1.85
Phenylethylphenyl acetate bots. lb. 4.00 - 4.25
Phenylglyconic acid (see Mendelic acid).
Phenylhydrazine, 97%, 450-lb dms. lb. 1.45 - —
1-Phenyl-3-methyl pyrazolone-5, fib. dms., 250-lb. lots, dlvd E lb. 1.80 - —
fib. dms. smaller lots, dlvd E lb 2.10 - —
o-Phenylphenol, dms., t.c.l., works. lb. .48 - .50
p-Phenylphenol, bgs. c.l., works lb. 38½- —
bgs., t.c.l., works lb. .43 - —
Philippine copal gum, pale, chips, bgs lb. 23¾ .26
nubs, bgs. lb. 33¼ .37
seeds, bgs lb. 20 Nom.
sorts, bgs. lb. .20 - .24
Phloroglucinol, coml., fib. dms., works lb 6.40 - —
CP, bots., works lb 17.75 - —
Tech., fib dms., works lb. 10.45 - —
Phloxin red toner (see Eosin red toner).
Phosgene, ret cyls. works lb 15½- —
Phosphate, defluorinated (see under D).
Phosphate rock, Curacao, Atlantic ports New Orleans ton 48.00 - —
Phosphate rock, Florida, land pebble, run-of-mine, washed, dried, unground 66-68%, b.p.l., bulk, c.l. mines, short-ton. 4.498 - —
68-70%, b.p.l., bulk, c.l., same basis short-ton. 5.148 - —
70-72% b.p.l., bulk, c.l., same basis short ton. 5.728 - —
74-75%, b.p.l., bulk, c.l., same basis short ton. 6.628 - —
76-77% b.p.l. c.l. bulk, same basis short ton. 7.518 - —
Above Florida prices are based on fuel oil at $2.37 per bbl. and labor at $1.59.
Phosphoric acid, food grade, 75%, cbys., c.l., works, E., frt. equald 100 lbs. 7.00 - —
cbys., l.c.l., same basis, 100 lbs 7.23 - 7.75
tanks, t.w., works 100 lbs 5.40 - —
80%, cbys., c.l., frt. equald 100 lbs 7.85 - —
cbys., l.c.l., works 100 lbs. 8.10 - 9.35
tanks, t.w., works 100 lbs 6.00 - —
NF, 85%, cbys., c.l., works 100 lbs. 8.50 - —
cbys., l.c.l., works 100 lbs. 8.75 - 9.00
tanks, t.w., works 100 lbs. 6.65 - —
Phosphorus, amorph., red, dms., t.l. works 15. .55 - —
dms. smaller lots, works lb. .55 - .57
white (yellow) solid dms., c.l., works, frt equald lb. .20 - .20½
dms., t.c.l., works, frt. equald lb. .21½- —
tanks, works, frt equald lb. .19 - —
Phosphorus oxychloride, dms., c.l., works lb. .14 - —
dms., t.c.l., works lb. .15 - —
tanks, works lb. .12½- —
Phosphorus pentasulfide, powd., dms., c.l. works lb. .13½- —
dms. t.c.l., works lb. .14½- .15½
Solid, dms., c.l., works lb. .11½- —
dms. t.c.l., works lb. .12½- 13½
Phosphorus pentoxide, dms., c.l., works lb. .1375- .1475
dms., t.c.l., works lb. .1475- .1675
Phosphorus sesquisulfide dms., cs., c.l., works lb. .38 - —
dms., t.c.l., works lb. .39 - .40
Phosphorus trichloride, dms., c.l., works lb. .14 - —
dms., t.c.l., works lb. .15 - —
tanks, works lb. .12½- —
Phthalic anhydride bgs. c.l., works, frt. equald lb. .17 - .19
bgs., t.c.l., same basis lb. .18 - .20
tanks, same basis lb. .16½- .18½
Phthalimide, 97-98%, dms., frt. alld lb. .65 - —
Phthalocyanine blue, full strength, bbls dlvd. E of Rockies lb 2.90 - —
Resinated, bbls., same basis lb. 2.75 - —
Water dispersable, bbls., same basis lb. 1.52 - —
Phthalocyanine blue prices 1c. higher W of Rockies.
Phthalocyanine green toner, bbls., works lb 3.35 - —
Resinated, bbls lb 3.00 - —
Water dispersable, bbls lb 1.71 - —
Phthalocyanine green prices 1c. higher W of Rockies
Phthalylsulfacetamide, fib. dms., 1,000-lb. lots or more lb 5.00 - —
NF fib dms lb 5.20 - —
a-Picoline, dms., c.l., works, frt. equald lb. .43 - .43¼
dms., t.c.l., works, frt. equald lb. .44 - —
tanks, same basis lb. .415 - .422
b-Picoline, 98% dms. t.l., works. lb. 1.05 - —
dms., t.c.l., same basis lb. 1.15 - —
tanks, same basis lb. .95 - —
b,g-Picoline, 95°C. dms. c.l., works. lb. .32½- —
dms. t.c.l. works lb. .33 - —
g-Picoline, dms., f.o.b., works lb 1.60 - —
tanks, t.l. same basis lb. 1.50 - —
Picric acid, NF bbls. lb. .85 - —
Tech. bbls. lb. 44 - —
Pigment green B, kgs lb. 1.50 - —
Pilocarpine hydrochloride, USP, bots oz. 5.25 - —
Pilocarpine nitrate USP bots. vials. oz. 5.15 - —
Pimento, Jamaican, bgs lb. .68 - —
Mexican, bgs lb. .57 - —
Pimento berry oil, NF dms. lb 3.75 - 9.25
Pimento leaf oil, crude, cns lb. 2.10 - 2.48
Pine oil, dest.-dist., cns., t.c.l. works lb. .15 - —
dms. t.c.l. ex whse New York. lb. .173 - —
Steam-dist., dms., ex whse., New York lb. .185 - —
dms., dlvd lb. .188 - —
Pineneedle oil, Siberian (see Abies Siberica oil)
Pinetar oil, coml. dms. c.l., works. lb. .0561- —
dms., t.c.l., works lb. .0634- —
dms., c.l., ex whse. New York. lb. .0745- —
tanks, works lb. .046 - —
NF, rectified, dms., incl., t.c.l., works, South lb. .40 - —
dms., t.c.l., ex whse. New York lb. .41½- —
Refd., dms., incl., t.c.l., works lb. .35 - —
dms., incl. t.c.l., ex whse New York lb. .36½- —
Pink root, bls. lb. 1.75 - —
Piperazine, anhyd., dms., c.l., frt. alld lb. 1.80 - —
dms., t.c.l., same basis lb. 1.85 - —
Piperazine citrate, 36%, dms., 1,000 lbs. or more frt. alld lb. 1.15 - —
Piperazine dihydrochloride, 51%, dms. 1,000 lbs. or more, frt. alld lb. 1.23 - —
Piperazine hexahydrate 44%, dms., 1,000 lbs. or more, frt. alld lb. .86 - —
dms., 200-900 lbs., frt. alld lb. .89 - —
Piperazine phosphate, 42% dms., 1,000 lbs. or more frt. alld. lb 1.06 - —
Piperidine, dist. 98% min., dms., frt. equald lb 2.60 - —
Piperonyl butoxide dms. dlvd E lb 4.50 5.05

**PITCHES**

**Pitch quotations are listed individually. For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.**

Plaster of Paris (see Gypsum)
Platinum metal, works oz.82.00 -85.00
Pleurisy root, bls lb 45 50
Podophyllum resin, NF, dms. lb.12.50 - —
Poke root, bls lb .19 .22
Polymyxin, bots., bulk, 50 billion units or more 1,000,000 units. .52 - —
bulk, bots., 25-50 billion units. 1,000,000 units. .54 - —
bulk, bots., 1-25 billion units. 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate, dms 20,000-lb. lots, works lb .42 - —
dms., 10,000-20,000 lb lots, works. lb. .44 - —
dms., smaller lots, works lb. .47 - .49
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb lots, works. lb. .42 - —
dms., 10,000-20,000-lb. lots, works lb. .44 - —
dms., smaller lots, works lb. .47 - .49
Pontianak copal gum, chips, bgs lb. .25 - —
Nubs, bgs lb .27 .40
Poppy seed, Argentine, bgs. lb. No stocks.
Dutch, bgs. lb. .22 —
Danish, bgs. lb. .20½ - —
Polish, bgs lb. .20 - —
Turkish, bgs. lb. .17½- —
Potash, caustic, liq., 45% basis, dms., c.l., works 100 lbs 4.25 - —
dms., t.c.l., same basis 100 lbs 5.05 - —
tanks, same basis 100 lbs 3.70 - —
reg., flake, 88-92%, dms., c.l., same basis 100 lbs. 9.15 - —
reg., flake, 88-92%, dms., t.c.l., same basis 100 lbs. 10.20 - —
solid, 88-92%, dms., c.l., works, 100 lbs. 8.70 - —
dms t.c.l works 100 lbs 9.75 - —
Potassium acetate, NF 200-lb dm., f.o.b works E lb. .31 - —
Potassium bicarbonate, USP, gran. dms lb. .22 - —
USP, powd., dms lb. .24 - —
Potassium bichromate, gran., bgs., c.l., t.l., works lb. .18 - —
bgs., t.c.l. works lb. .18½ - 19¾
Potassium bichromate in dms. ¾c. higher.
Potassium bitartrate, NF, gran., powd., 100-lb. bgs., c.l., frt. equald lb. .37 - —
100-lb. bgs., 5,000 lbs. 1 shipt., same basis lb. .38 - —
100-lb. bgs., smaller lots, same basis lb. .40 - —
Potassium borohydride, powd., dms., works lb 16.00 - 22.00
Pelletized postassium borohydride $1.25 per lb higher in 1,000-lb. lots.
Potassium bromate, dms., 1,000-lb. lots or more, works lb. .50 - —
dms., smaller lots, works lb. .52 - .62
Potassium bromide, USP, gran., bbls., kgs lb. .39 - .40
Potassium carbonate, dom., NF, gran., bbls. dms lb. .20 - —
Dom., tech. powd., bbls., dms lb. .21 - .22
Dom., calcinated, bgs., c.l., works, 100 lbs. 8.50 - —
bgs., t.c.l., same basis 100 lbs. 9.55 - —
Dom., hydrated, 83-85%, bgs., c.l., works 100 lbs. 7.10 - —
bgs., t.c.l., works 100 lbs. 8.15 - —
Potassium chlorate, cryst., dms., c.l., works lb. .12¼- —
dms., t.c.l., works lb. .13½- .14½
Powd., dms., c.l., works lb. .12¾- —
dms., t.c.l., works lb. .14 - .15
NF, cryst., dms., 2,000 lbs. or more, works lb. .12¼- —
NF, gran. 25-lb metal dms lb. .16¾- —
NF, powd., dms., 2,000 lbs. or more, works lb. .17¼- —
Potassium chloride, indust., 99.9% KCL, bulk, c.l. works ton 29.00 - —
bgs., c.l., works ton 33.50 - —
99.3% KCL, bulk, c.l., works ton 27.00 - —
bgs. c.l. works ton 31.50 - —
USP, cryst., dms. lb. .20 - .22
USP, gran., dms. lb. .21 - .23
USP, powd., dms. lb. .24 - .26
Potassium chloride, agricultural (see Potassium muriate)
Potassium chromate tech., dms., works lb. .50 - .51
Potassium citrate, NF, gran., 250-lb. dm., f.o.b. works E lb. .43 - —
powd., 250-lb. dms, same basis. lb. .46 - —
Potassium cyanide, dms. 20,000-lb. lots or more, works lb. .42½- —
dms., 2,000-19,999 lb lots, works. lb. .43 - —
dms., smaller lots, works lb. .44 - .44½
Potassium dichromate (see Potassium bichromate)
Potassium ferricyanide, dms., ton lots, works lb. .50 - —
dms., smaller lots, works lb. .65 - —
Potassium ferrocyanide, dms., ton lots lb. .24½- —
dms., smaller lots lb. .29 - —
Potassium fluoborate, fib dms., c.l., works lb. .30 - —
fib dms. t.c.l. works lb. .31 - —
Potassium fluoride, dms., works lb. .37 - .38
Potassium gluconate, 100-lb. dm., f.o.b works E lb. 1.67 - —
Potassium guaiacol sulfonate, NF, dms lb 2.10 2.30
Potassium hydroxide, tech (see Potash caustic).
Potassium hydroxide, USP, pellets, 100-lb. dms., 1 to 100-dm. lots lb. .33½- .38
Potassium hypophosphite, NF, fib. dms., 1,000-lb lots lb. 1.38 - —
Potassium iodide, USP, cryst., gran., or powd., 250-lb. dm., f.o.b. works lb. 1.40 - —
Potassium manure salt, 22% K.O. bulk, c.l., works unit-ton. .17 - .1765
Potassium metabisulfite, gran., dms. lb. .16 - —
Powd., dms. lb. .27 - —
Potassium muriate, standard, bulk, c.l., works unit-ton. .34½- .36½
bagged, 60% minimum K.O. same basis ton 25.60 -26.80
Gran., bulk, c.l., works unit-ton. .35 - .37

Potassium muriate, bagged, 60% minimum $K_2O$, same basis, ton 25.90 -27.10
Inside prices apply to material contracted for prior to July 1, 1959.
Outside prices apply to material contracted for after that date but also for delivery during the current month.
Potassium nitrate, NF, cryst., bbls., 20-ton lots 100 lbs. 17.00 - —
bbls., smaller lots 100 lbs. 18.00 -19.00
NF, gran., bgs., 20-ton lots, 100 lbs 9.50 —
bgs., smaller lots 100 lbs. 11.00 -12.00
NF, powd., bgs., 20-ton lots. 100 lbs. 10.50 - —
bgs. smaller lots 100 lbs. 12.00 -13.00
Potassium oxalate, neutral, tech., fine gran., powd., 300-lb. dm., f.o.b. works E lb. .32 - —
Potassium pentaborate, gran., dms., c.l., works ton 219.50 - —
dms., ton lots, ex whse ton 311.00 - —
dms., smaller lots ex whse ton 316.00 - —
Powdered potassium pentaborate $10 per ton higher.
Potassium perchlorate, dms., c.l., works lb. .18½- —
dms., l.c.l., works lb. .19 - .20
Potassium permanganate, coml., kgs., works lb. .25 - .33
USP, dms., works lb. .29 - .35
Potassium persulfate, dms., c.l., works lb. .17½- —
dms., l.c.l., works lb. .18 - .21
Potassium pyrophosphate, tetrabasic, dms., works lb. .15½- .18½
Potassium prussiate red (see Potassium ferrocyanide).
Potassium prussiate yellow (see Potassium ferro-cyanide).
Potassium silicate, electrical grade, 30° Be, 1:2.0, dms., c.l., works 100 lbs. 6.50 - —
dms., l.c.l., 5 dm. lots or more, works 100 lbs. 7.25 - 7.65
tanks, works 100 lbs. 6.15 - —
40.5° Be, 1:2.1, dms., c.l., works, 100 lbs. 5.95 - —
dms., l.c.l., 5 dm. lots or more works 100 lbs. 6.70 - —
tanks works 100 lbs 5.60 - —
Glass grade, bgs., c.l., works, 100 lbs. 17.30 -13.00
bgs., l.c.l., works 100 lbs. 17.80 —
Soln., 29° Be, 1:2.5, dms., c.l., works 700 lbs. 4.95 - —
dms., l.c.l., 5-dm. lots or more, works 100 lbs. 5.70 - —
tanks, works 100 lbs. 4.60 - —
Potassium silicofluoride, bgs., works lb. .09½- .10
Potassium silicofluoride in drums, 0.4c. per lb. higher.
Potassium stannate, dms., frt. alld. E. lb. .784 - .857
Potassium sulfate, agricultural, bulk, c.l., works unit-ton .67½- .69½
Inside price applies to tonnage contracted for prior to July 1, 1959.
Outside price applies to tonnage contracted for after that date but also for delivery during the current month
Potassium sulfate, NF VII, cryst., dms lb. .31 - .33
NF VII, gran., dms lb. .18½- —
NF VII, powd., dms lb. .16 - .17
Potassium sulfocyanate, NF, cryst. (see Potassium thiocyanate).
Potassium thiocyanate, NF, cryst., dms., works lb. .96 - .98
Tech., dms., works lb. .77 - .79
Potassium titanate, ctns., c.l., works, lb. .16½- —
ctns., 5-ton lots, works lb. .16½- —
ctns., 1-ton lots or less, works lb. .16¾- —
Potassium-magnesium sulfate, basis 40% $K_2SO_4$ and 18% MgO, bulk, works, base price ton 13.45 - —
bulk, works, July forward ton 14.00 - —
Potassium-sodium tartrate, NF, gran. or powd., 250-lb dms., c.l., f.o.b. works E lb. .42½- —
250-lb. dms., 5,000-lb. lots, same basis lb. .43 - —
250-lb. dms., same basis lb. .43½- —
Potassium-titanium fluoride, fib, dms. works lb. .39 - .40
Potassium-zirconium fluoride, fib, dms., c.l., works lb. .50 - —
fib dms l.c.l. works lb .52½ - 55
Pregnenolone, bots. gram, No prices
Pregnenolone acetate, bots. gram, No prices.
Procaine hydrochloride, USP, dms., 1,000-lb. lots, frt. alld lb. 2.60 - —
dms. 100-500 lb lots lb 2.95 3.15
Progesterone, USP, bots. gram, No prices.
Progesterone acetate, bots. gram, No prices.
Propenyl guaethol, dms. lb 24.30 -27.00
b-Propriolactone, dms., c.l., t.l., f.o.b. works lb. .89 - —
dms., l.c.l., t.l., same basis lb. .90 - —
tanks, same basis lb. .87 - —
Propionic acid, syn., pure, dms., c.l., works lb. 23¼ —
dms., l.c.l., works lb. .24¾- —
tanks, works lb. .20¾- —
n-Propyl acetate, dms., c.l., dlvd. lb. .14¾- —
dms., l.c.l., dlvd lb. .16¼- —
tanks, dlvd lb. .12¼- —
n-Propyl alcohol, dms., c.l., dlvd lb. .14 - —
dms., l.c.l., dlvd lb. .15½- —
tanks, dlvd lb. .11½- —
n-Propyl gallate, dms., 100 to 2,000-lb lots, works lb 3.90 - 4.40
n-Propyl-p-hydroxybenzoate, USP, dms lb 2.30 2.40
Propyl thiouracil, bots., 50 kilo lots or more kilo 55.00 —
bots., smaller lots kilo 55.10 -55.30
n-Propylamine, dms., c.l., dlvd lb. 1.24 - —
dms., l.c.l., same basis lb. 1.255 - —
n-Propylene dichloride, consumers' dms., c.l., dlvd. E lb. .0845- —
dms., l.c.l., same basis lb. .0995- —
tanks, same basis lb. .07 - —
Propylene dichloride prices in West 1c. higher, same basis
Propylene glycol, indust., dms., c.l., dlvd. E lb. .15 - —
dms., l.c.l., same basis lb. .16¾- —
tanks, same basis lb. .12½- —
USP, dms., c.l., dlvd. E lb. .17 - —
dms., l.c.l., same basis lb. .18¾- —
tanks, same basis lb. .14½- —
Propylene glycol methyl ether, dms., c.l., dlvd lb. .20 - —
dms., l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½- —
Propylene oxide, dms., c.l., dlvd E, lb. .17 - —
dms., l.c.l., dlvd. E. lb. .18½- —
tanks, dlvd. E. lb. .14½- —
Psyllium seed, black, bgs lb. .30 - .35
Blonde, bgs. lb. .18 - .20
Husks, bgs. lb. .42 - .45

Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03¾- .04½
bgs., smaller lots lb. .03½- —
Imp., Italian, silk-screen, coarse, bgs., ton lots lb. .06½- —
fine, bgs., ton lots lb. .04 - —
sun dried, coarse, bgs ton 60.00 - —
fine, bgs. ton 60.00 -70.00
Pumpkin seed, bgs. lb. .25 - .26
Pyrethrins, syn. (see Allethrin).
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bgs., ton, works lb. .50 - —
Powd., 1.3% pyrethrins, bgs., ton, works lb. .71 - —
Pyrethrum liquid, 20:1 basis (2 grams pyrethrins per 100cc odorless base), dms., works gal. 9.60 - 9.80
Pyrethrum liquid, 100:1 basis (10 grams pyrethrine per 100cc odorless base), dms., works, gal. 45.90 -46.90
Pyrethrum oleoresin, dewaxed, 20% dms., works lb. 11.00 -11.35
purif., 20%, dms., works lb. 11.00 -11.35
Pyridine, denat., dms c.l., works and frt equald gal 2.77 - —
dms l.c.l., same basis gal 2.80 - —
Refd., 2°, non-ret. dms., l.c.l., same basis lb. .70 - —
tanks, same basis lb. .65 - —
Pyridoxine hydrochloride, USP, 500-gram bots., dms., f.o.b. works, kilo 175.00 - —
Pyrites, Canadian, 48-50% S, mines, long-ton 5.00 6.00
Pyrocatechol (see Catechol)
Pyrogallic acid, NF (see Pyrogallol)
Pyrogallic acid, tech., bbls., 100-lbs., f.o.b. works lb. 3.50 - —
Pyrogallol, NF, 100 lb. dms. lb 3.50 - —
Pyroxylin, USP bots. lb 9.50 - —

## Q

Quassia chips lb. .10 - —
Quicksilver (see Mercury metal)
Quince seed, bgs lb 1.15 1.50
Quinidine sulfate, USP, cns oz. .74½- 77
Quinine, NF, cns., 100-oz lots oz. .34 Nom.
Quinine bisulfate, USP cns oz. .27½ 29
Quinine hydrochloride, cns oz. .23 - .26
Quinine sulfate, USP, cns oz. .23 - —
Quinoline, dms., c.l., frt. equald lb .50¼ —
dms., l.c.l., same basis lb. 51¼ —
tanks, same basis lb. .50 - —

## R

R salt, paste, dms frt. alld., 100% basis lb. .98 - —
Powd., frt. alld. 100% basis lb. 1.08 - —
Rapeseed oil, dms lb. .14¾- .15
tanks lb. .12¾- —
Rare earth chloride, 46%, dms., dlvd lb. .25 - —
Rare earth, oxalate, NF, 45-50%, bgs., works lb. 1.15 - —
Rauwolfia serpentina root, powd., bbls., dms lb 1.00 1.20
Red carmine, No. 40 (see Carmine).
Red oil (see Oleic acid)

**RED PIGMENTS**
**Red pigment quotations are listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner.**

Red precipitate (see Mercuric oxide, red).
Reserpine, cryst. bots gram 1.25 - —
Resorcinol, tech grade, dms., c.l., works, frt. equald lb 77½ —
dms., l.c.l., same basis lb 78½ —
USP, powd., dms., works lb. 2.95 - —
Resorcinol monoacetate, NF, dms. lb 2.50 - —
Rhatany root, bgs. lb. .14 - .16
Rhodamine red toner, molybdated, PMA, kgs., works lb. 6.00 - —
Tungstated, PTMA, works, kgs lb 6.60 - —
Rhodinol, 5-lb. cans lb. 42.00 -51.00
Synthetic lb. 14.00 -16.00
Rhubarb root, India whole, bgs lb. .25 - —
powd., bgs. lb. .35 - —
Riboflavin, USP, fib, dms., kilo or more, dlvd kilo 36.00 - —
Riboflavin, USP, readily soluble, bots., dlvd kilo 130.00 - —
Riboflavin, 5-phosphate-sodium fib, dms., kilo or more dlvd, kilo 104.50 - —
Rice bran oil, clarified, dms. l.c.l. lb. .14½- .15
tanks, dlvd. E lb. .12½- —
Ricinoleic acid (see Castor oil acids split)
Rochelle salt (see Potassium sodium tartrate).
Roofing pitch (see Coaltar pitch roofing)
Rose oil, nat., Bulgarian bots oz 72.00 —
Turkish bots. oz 55.00 -58.00
Rosemary oil, Spanish, NF, cns., dms lb .97 1.20
Spanish, tech., cns., dms. lb. .50 1.20
Rosin, gum and wood (see Naval Stores in Protective Coatings market)
Rotenone, fib, dms., works, unit-lb. .12 - —
Resin, 25-45% fib dms., works, unit-lb. .12 - —
Rottenstone, bgs., 5-ton lots, ex-whse lb. 03¾- —
bgs., ton lots same basis lb. .04¼- —
Rubber solvent, petroleum, 115°F-245°F b.r., tankcars, New Jersey and New York gal. .19 - —
Group 3 gal. .13875- —
Houston, Texas gal. .155 - —
Rue oil, bots. lb 2.75 3.00
Rutin, NF, fib dms., 10 kilo lots kilo 13.00 - —
fib dms., 5 kilo lots kilo 13.50- —
fib dms., 1 kilo kilo 14.00 - —
Ryania, 100%, powd., bgs., c.l., works lb. .22 - —
bgs., l.c.l., same basis lb .24 - —

## S

S acid, bbls., works lb 3.25 - —
Sabadilla seed, activated, ground with lime, bbls lb .42 - .44
Saccharin, calcium, fib dms., 1,000-lb. lots, works lb 2.50 - —
USP, gran., soluble, dms., 1,000-lb. lots, lb. 1.40 - —
dms., smaller lots lb. 1.50 - —
USP, powd., soluble, insoluble, dms., 1,000-lb. lots lb. 1.45 - —
dms., smaller lots lb. 1.55 - —
USP, powd., insoluble, dms., 1,000-lb. lots, lb. 1.43 - —
dms., smaller lots lb. 1.53 - —
Safflower oil, dms., New York lb. .1785- .1830
tanks, Atl. Coast .1585- —
Saffron, Mancha Superior, tins lb. 19.50 - —
Safrol, dms. lb. .70 - —
Sage, Dalmatian, bgs. lb. .40 - —
Greek, cns. lb. .16 - —
Italian, cns. lb. .18 - —
Sage oil, clary, bots. lb. 20.00 -30.00
Dalmatian, cns. lb. 2.85 - 3.25
Spanish, cns. lb. 1.25 - 1.75
Sal soda (see Soda sal).
Salicylaldehyde, dms., c.l., t.l., f.o.b. plant, frt. equald lb. 1.23 - —
dms., l.c.l., same basis lb 1.25 - —
Salicylamide, 100-lb dms lb 1.05 - —
Salicylic acid, crude, fib dms., c.l., t.l., frt alld lb. .37¼- —
fib. dms. l.c.l., frt. alld. on 100 lbs. or more lb. .38½- —
Sublimed, tech., fib dms., c.l., t.l. dlvd lb. .39¼ —
fib. dms., l.c.l. dlvd lb. 43½- —
USP, cryst., 200-lb. fib. dms., 1,000 lbs. or more lb. 50½- —
200-lb fib. dms., less than 1,000 lbs lb. .53½- —
100-lb. fib. dms., 1,000-lbs. or more lb. .52½- —
100-lb fib dms. less than 1,000 lbs. lb. .55½- —
USP, powd., 100-lb. fib. dms., 1,000 lbs. or more lb. .57½- —
100-lb fib dms., less than 1,000 lbs lb .60½- —
Salol, NF, gran. bbls. kgs lb 1.20 - —
Powdered salol 25c per lb higher
Salt, rock, paper bgs., c.l. 100 lbs 1.09 - —
Salt, table vacuum, common, fine, paper bgs. c.l 100 lbs 1.34 - —
Saltcake, dom., bulk, works, 100% $Na_2SO_4$ basis ton 28.00 - —
Saltpeter (see Potassium nitrate)
Sandalwood, E Indian chips, bgs. lb 65 - 66
powd. fib. dms lb 75 - 76
Sandalwood oil, cns lb. 16.25 -17.50
Sarcosine, tech. tanks, f.o.b., works, frt equald lb 1.03 - —
Sardine oil, crude, tanks, Pac. coast lb. No stocks
Sassafras oil, artif., dms. lb. .43 - —
Nat., dom., dms lb. 1.45 - 2.15
Savory oil, cns lb 4.75 - —
Schaeffer's salt, paste, dms frt. alld. 100% basis lb. 85 - —
Powd. bgs. frt. alld. 100% basis. lb. 95 - —
Scopolamine hydrohromide, USP bots oz. 13.00 - —
Sebacic acid, CP, bgs., c.l., works, lb 69½- —
bgs., l.c.l., works lb. 71½- —
Purified, bgs., c.l., works lb. 65½- —
bgs., l.c.l., works lb. 67½- —
Seidlitz mixture, fib dms. 5,000-lb. lots lb. 30½- —
fib. dms., smaller lots lb 31 - 32
Selenium powd. 99½% dms., dlvd lb 7.00 —
Senega root, bls. lb. 3.00 - 3.25
Senna leaves, Alexandria, whole and half, bls lb. .20 - .22
siftings lb. .16 - —
Senna leaves, Tinnevelly, No. 1, bls. lb. .22 - —
No. 2, bls. lb. .18 - —
No. 3, bls. lb 14 - —
pods, bls. lb 23 - —
powd. bbls., bxs. lb 17 - —
Serpentaria root, bls. lb. 6.50 - —
Sesame oil, USP, dms. lb .24 - .30
Sesame seed, Colombian, bgs. lb. .15½- —
Lebanese, hulled, bgs lb .19 - —
Nicaraguan, hulled, bgs lb. .21½- —
nat., bgs. lb. .14 - —
Salvadorian, nat., bgs lb. .16 - —
Shellac, bleached, bonedry, bgs., 1,500-lb lots lb. .46 - —
bbls., 1,500-lb. lots lb. .47 - —
kgs., 1,500-lb lots lb. .48 - —
Bonedry shellac prices for less than 1,500-lb lots 1c. per lb higher for all packages.
Shellac, bleached, refd., bgs., 1,500-lb lots lb. .53 - —
bbls., 1,500-lb. lots lb. .57 - —
kgs., 1,500-lb. lots lb. .58 - —
Shellac, orange, lemon, No. 1, bgs., 10-bg. lots lb. .37 - .39
lemon No. 2, bgs., 10 bg. lots, lb. .34 - .37
superfine, bgs., 10-bg. lots lb 32 - .34
Shellac in 1 to 10-bg. lots 1c. per lb. more.
Shingle stain oil, tar distillate, dms., c.l., works gal. .37 - —
dms., l.c.l., works gal. .48 - —
tanks, works gal. .25 - —
Sienna pigment, burnt, paper bgs., c.l., works lb. .03½- .18½
paper bgs., l.c.l., works lb .06¾- .17¾
Raw, paper bgs., c.l., works lb. 06¾- .16¾
paper bgs., l.c.l., works lb. 07 - .17
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works ton 25.00 - —
bgs., l.c.l., works, ex whse ton 45.00 -55.00
Hard-quartz, 99½%, 325 mesh, bgs. c.l., works ton 20.00 - —
bgs, l.c.l., works ton 25.00 - —
99½%, 140 mesh, bgs., c.l., works ton 15.60 - —
bgs., l.c.l., works ton 20.00 - —
Silicon tetrachloride, tech., dms., c.l., works lb. .18 - —
dms., l.c.l., works lb. 22 - .30½
tanks, works lb. 17 - —
Silver bullion, ingots, cs Troy oz. .91%- —
Silver cyanide, bots., 1,000-oz. lots, oz. .94¾- —
bots., 500-oz. lots oz. .95¼- —
bots., 100-oz. lots oz. .96¼- —
Silver nitrate, CP, cryst., bots., 1,000 to 3,000-oz., f.o.b. works, oz. .87¼- —
bots., 250-500 oz., same basis, oz. .87¾- —
USP granular silver nitrate 4c. per oz. higher
Silver proteinate, mild, USP, bots., dms., 1,000-oz. lots oz. 1.15 - —
Strong, NF, bots., dms., 1,000-oz. lots oz 1.10 - —
Snakeroot oil, Canada, cns lb. 40.00 -43.00
Soapbark, crushed, bls lb. .30 - .35
Powd., bls. lb. .35 - .40
Whole, bls. lb. .20 - .25
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 - —
paper bgs., l.c.l., stock pts., 100-lbs. 3.00 - 4.77
bulk, c.l., works 100 lbs. 1.60 - —
Light, 58%, paper bgs., c.l., works 100 lbs. 1.85 - —
paper bgs., l.c.l., stock pts., 100 lbs. 3.95 - 4.72
bulk, c.l., works 100 lbs. 1.55 - —
Soda, caustic, flake, 76%, dms., c.l., works, frt. equald 100 lbs. 5.20 - —
liq., 50%, sellers' tanks, works, dry basis 100 lbs. 2.90 - —
50%, rayon type, sellers' tanks, works, dry basis 100 lbs. 2.90 - 3.00
73% sellers tanks, works, dry basis 100 lbs. 3.00 - —
Soda, caustic, liq., 73%, rayon type, sellers' tanks, works, dry basis 100 lbs. 3.00 - 3.10
solid, 76%, dms. c.l., works, 100 lbs 4.80 - —
Soda, sal, conc., bgs., c.l., works, 100 lbs 2.50 - —
bgs. smaller lots, works 100 lbs 2.80 - —
Sodium acetate, anhyd., bgs., c.l., dlvd. E lb. .14½- —
NF, 60% gran. dms. c.l., works, lb 15½- —
dms., l.c.l., works lb. 17½- —
Sodium alginate, NF, white powd. dom., 300 lbs or more lb 1.02 - —
Sodium p-aminosalicylate, dms., 100-lb. lots or more frt adjusted lb 1.90 - —
Sodium antimoniate, bgs., c.l., dlvd. E lb 25½- —
bgs., l.c.l., dlvd E lb .27 - —
Sodium arsenate, 60% arsenic pentoxide, dms., any quantity, f.o.b. works lb. .40 - —
Sodium arsenite, 90% pink powder, 75% arsenious oxide, dealers, dms., ton lots or more works lb. .27½ —
dms., less than ton lots, works lb .18 - .19
Sodium ascorbate, dms 25-50 kilo dms., f.o.b. works kilo 10.00 - —
10-kilo dm. same basis kilo 10.25 - —
5-kilo dm. same basis kilo 10.75 - —
1-kilo bot., same basis kilo 11.00 - —
Sodium benzoate, tech., dms., c.l., t.l., frt. alld lb .33 - —
dms., l.c.l., same basis lb .39 - —
USP, dms., c.l., t.l. frt. alld lb. .38 - —
dms., ton lots, same basis lb. .43 - —
dms., 1,000-lb lots, same basis, lb. .45 - —
Sodium bicarbonate USP, gran., bgs., c.l., works 100 lbs 2.95 - —
bgs., l.c.l., works 100 lbs 3.85 - —
USP, powd., bgs., c.l., works, 100 lbs 2.55 - —
bgs., l.c.l., works 100 lbs 3.45 - —
Sodium bichromate, gran., bgs., c.l. t.l., works lb .13 - —
bgs., l.c.l. works lb .13½- .14¾
Sodium bichromate in dms ¼c. per lb. higher
Sodium bifluoride, bbls. c.l., works, frt. equald lb 19½- —
bbls., l.c.l., same basis lb. .2025- —
Sodium bisulfate, bulk c.l. works 100 lbs 2.00 —
dms., c.l., frt. equald 100 lbs 3.00 3.60
dms., l.c.l., frt. equald 100 lbs 3.50 4.10
Sodium bisulfite, anhyd., bgs., c.l., works 100 lbs 5.00 - —
bgs., l.c.l., works 100 lbs 5.45 - —
Soln., 35° bbls., c.l. works 100 lbs 1.70 - —
bbls., l.c.l., works 100 lbs 2.20 - —
Sodium borate (see Borax)
Sodium borohydride, powd., dms., c.l., works lb. 19.90 - —
dms., l.c.l., works lb. 33.00- 40.00
Sodium borohydride, stabilized water soln., 12% $NaBH_4$, 100% basis, dms., works lb. 15.00 - —
Pelletized sodium borohydride $1 per lb higher in 1,000-lb lots.
Sodium bromide, USP, gran., dms., works lb. .40 - —
Sodium carbonate, cryst., monohydrated (see Soda, sal)
Sodium carbonate, monohydrated, bgs., c.l., works 100 lbs 3.10 - —
bgs., l.c.l., works 100 lbs 3.50 - —
Sodium carboxymethyl cellulose (see CMC).
Sodium chlorate, cryst., 350-lb dms., c.l. works lb. .09 - —
dms., l.c.l., works lb .09½- .10¼
Sodium chlorate in 100-lb dms. only, ¼c. per lb higher.
Sodium chloride, tech (see Salt)
Sodium chloride, USP, gran., bgs. lb .05 - —
Sodium chlorite, tech., dms., c.l., works lb .58 - —
dms., 20-dm lots or more works, lb. .66 - —
dms. smaller lots, works lb. .70 - 73
Sodium chloroacetate, tech., dms., c.l., works lb .27 - —
dms., l.c.l., works lb .28 - —
Sodium chromate, anhyd. fib dms., c.l., t.l., works lb .14¾- —
fib dms. l.c.l., works lb .15¼ .16¼
Sodium chromate, tetrahydrate, bgs., c.l., t.l., works lb. .1015- —
bgs., l.c.l. lb. .1065- .1190
Sodium citrate, anhyd 200-lb dm., c.l., t.l., works E lb .62 - —
NF VIII, gran. bgs. c.l., same basis lb. .26 - —
USP XIV gran. bgs. c.l., same basis lb .29 - —
Sodium citrate USP powd prices ½c higher.
Sodium cyanate, dms., 1,000-lb lots, works lb .85 —
dms., smaller lots, works lb .90 1.10
Sodium cyanide, flake, 96-98%, dms., c.l. or 20,000 lb. lots lb .193 —
dms., over 1,000-lb lots lb .203 —
dms., 100-lb to 1,000-lb lots lb. .213 —
Gran sodium cyanide 1c higher
Sodium cyclamate, 100-lb dm., f.o.b. works lb. 1.95 - —
Sodium diacetate, anhyd., 39-41% acetic acid, dms., c.l., works lb. .18 - —
250-lb dms. l.c.l. works lb. .18¾- —
Tech., 33-35% acetic acid, dms., l.c.l., works lb. 15 - —
250-lb dms. l.c.l. works lb. .15¼ —
Sodium dimethyl dithiocarbamate, 40% soln dms c.l., t.l., frt. alld., 100% basis lb 42 —
dms., l.c.l., t.l., same basis lb .47 .52
tanks, same basis lb .38 - —
Sodium ferrocyanide, bgs., 10-ton lots lb. .13½ —
bgs. smaller lots lb. .14¾ —
Sodium fluoride, white, 97%, fib dms., c.l., works, frt. equald lb. .1390- —
fib. dms., l.c.l., works, frt equald lb. .1465- —
Sodium formate, bgs., c.l. works 100 lbs 7.05 - —
bgs. l.c.l., ex whse. 100 lbs 8.65 - —
Sodium gentisate, 100-lb fib dms lb 5.50 - —
Sodium gluconate, refd 250-lb dm., f.o.b works E lb .84 - —
Tech. bgs. c.l. t.l. same basis lb. .34 - —
Sodium hydride, 50% soln. in oil, dms. works lb. 1.25 2.50
25% soln. in oil, dms. 50 lbs or less, f.o.b. shipping point lb 2.20 - —
dms. 50-99 lbs. same basis lb 1.77 - —
dms. 100-999 lbs. same basis lb 1.20 - —
dms., 1,000 lbs. or more, same basis lb. .95 - —

Sodium hydrosulfide (see Sodium sulfhydrate).
Sodium hydrosulfite, dms., c.l., frt. alld. lb. .23¼- —
dms., l.c.l., frt. alld. lb. .25¾- —
Sodium hydroxide, NF pellets, 100-lb dms., 1 to 100-dm lots, lb. .23½- .28
Sodium hydroxide, tech (see Soda, caustic).
Sodium hypophosphite, NF, dms., 1,000-lb lots lb. .97 • —
Sodium hyposulfite (see Sodium thiosulfate).
Sodium iodide, USP, 300-lb. dm., f.o.b. works lb. 1.98 • —
Sodium lauryl sulfate, dms., c.l., divd lb. .20½- —
dms., l.t.l., divd. lb. .21½- —
tanks, divd. lb. .19½- —
Sodium lignin sulfonate, bgs., c.l., works 100 lbs 4.25 • 6.50
l.c.l., bgs., works 100 lbs. 4.40 • 7.00
Sodium metabisulfite (see Sodium bisulfite).
Sodium metaborate octahydrate, gran., bgs., c.l., works ton.210.00 • —
bgs., ton lots, ex whse 100 lbs. 8.00 • —
bgs., smaller lots, ex whse, 100 lbs 9.25 • -11.25
Tetrahydrate, bgs., c.l., works ton.210.00 • —
bgs., ton lots, ex whse 100 lbs.13.93 • —
lbs.13.93 • —
bgs., smaller lots, ex whse, 100 lbs.15.18 -17.18
Sodium, metallic, bricks, c.l. works, lb. .21 • —
Fused, 18,000-lb. lots or more, works lb. .19¼- —
tanks, works lb. .17 • —
Sodium metalinate, bbls., frt. alld. lb. .62 • —
Sodium metaphosphate, bgs., c.l., f.o.b. shipping pt. 100 lbs.11.10 • —
bgs., l.c.l., same basis 100 lbs.11.85 • —
dms., c.l., same basis 100 lbs.11.70 • —
dms., l.c.l., same basis 100 lbs.12.45 • —
Sodium metasilicate, anhyd., bgs., c.l., works 100 lbs 5.70 • —
bgs., 6,000-19,900 lb lots, works, 100 lbs 6.05 • —
dms., c.l., works 100 lbs 6.20 • —
dms., l.c.l., works 100 lbs 6.55 • —
Sodium metasilicate pentahydrate, bgs., c.l., works 100 lbs 4.45 • —
bgs., l.c.l., works 100 lbs 4.80 • 6.75
dms., c.l., works 100 lbs 4.95 • —
dms., l.c.l., works 100 lbs 5.30 • 7.25
Sodium molybdate, anhyd., dms., works, frt. equald lb. .92 • .99
Cryst., dms., works, frt. alld lb. .74 • .76
Sodium monoglutamate (see Monosodium glutamate).
Sodium monohydrate (see Sodium carbonate, monohydrated).
Sodium naphthionate, bbls. lb. .70 • —
Sodium nitrate, dom., crude, bgs., c.l., works ton.48.00 • —
bulk, c.l., works ton.44.00 • —
Imp., crude, 100-lb. bgs., c.l., Atl., Gulf, Pac., whse ton.48.00 • —
bulk, c.l., same basis ton.44.00 • —
Sodium nitrite, USP, bbls., c.l., works, frt. equald 100 lbs. 9.00 • —
bbls., l.c.l., same basis 100 lbs.11.00 • —
Sodium ortnosilicate, conc., dms., c.l., works 100 lbs. 6.70 • —
dms., l.c.l., works 100 lbs. 7.05 • 7.65
Hydrated, flake, bbls., c.l., works, 100 lbs. 5.65 • —
bbls, l.c.l., works 100 lbs. 7.60 • 7.90
Sodium oxalate, 58%, bgs., works, 100 lbs.12.35 • —
99%, bgs., works 100 lbs.15.40 • —
Sodium para-aminobenzoate (see Sodium p-aminobenzoate).
Sodium para-aminosalicylate (see Sodium p-aminosalicylate).
Sodium pentachlorophenate, briquets, dms., c.l., works, frt. equald lb. .26 • —
dms., l.c.l., same basis lb. .27½- .34
Sodium pentachlorophenate, pellets, dms., c.l., same basis lb. .26 • —
dms., c.l., same basis lb. .27½- .34
Powd., dms., c.l., same basis lb. .25 • —
dms., l.c.l., same basis lb. .26½- .33
Sodium pentobarbital, USP, dms., 100 lbs. or more lb. 6.00 • —
Sodium perborate, NF, tech., bgs., c.l., works lb. .18½- —
bgs., l.c.l., works lb. .19 • .21
Sodium peroxide, dms., c.l., t.l., divd. E. of Miss lb. .21½- —
dms., l.c.l., same basis lb. .22 • .22½
Sodium phenobarbital, USP, 100-lb. dms lb 3.75 • —
Sodium phenosulfonate, USP IX, gran., dms. lb. .82 • .88
NF, powd., dms lb. .55 • .56
Sodium phosphate, dibasic, anhyd., bgs., c.l., frt. equald, 100 lbs. 7.95 • —
bgs., l.c.l., same basis 100 lbs. 8.35 • 9.40
Dibasic, cryst., bgs., c.l., t.l., frt. equald, 100 lbs. 4.60 • —
bgs., l.c.l., frt equald 100 lbs. 5.00 • 5.75
Dibasic, duohydrate, bgs., c.l., frt. equald 100 lbs. 7.60 • —
bgs., l.c.l., same basis 100 lbs. 8.10 • —
USP, dried, powd., bgs., dms., works lb. .19 • .20½
Monobasic, anhyd., bgs., c.l., frt. equald 100 lbs. 9.00 • —
bgs., l.c.l., same basis 100 lbs 9.40 • 10.00
Tribasic, anhyd., bgs., c.l., frt. equald 100 lbs. 9.00 • —
bgs., l.c.l. frt. equald 100 lbs 9.45 • 10.05
Sodium phosphate in dms 60c to 80c higher than bgs
Sodium picramate, tech paste, dms., f.o.b., works, frt equald lb. .90 • —
Sodium prussiate, yellow (see Sodium ferrocyanide)
Sodium pyrophosphate acid, bgs., c.l., works, frt equald. 100 lbs.11.10 • —
bgs., l.c.l., same basis 100 lbs.11.85 • 12.35
Sodium pyrophosphate, ferric, dms., c.l., t.l., works lb. .36 • —
dms., l.c.l., works lb. .37 • .39
Sodium pyrophosphate tetrabasic, anhyd., bgs., c.l., works, frt equald 100 lbs 7.81 • —
bgs., l.c.l. same basis 100 lbs 9.21 • 9.71
Sodium salicylate USP dms., 1,000-lbs or more lb. .78½- —
dms., less than 1,000 lbs dms. lb. .81½- —
Sodium sesquicarbonate, bgs., c.l., works 100 lbs 2.35 • —
bgs., l.c.l., divd. zone 1 100 lbs 4.10 • 4.35
divd. zone 2 100 lbs 4.35 • 4.60
divd. zone 3 100 lbs 4.75 • 4.90
divd zone 4 100 lbs 5.35 • 5.60

Sales zones are: (1) Atl states E. of Miss., R and N of south bound of Ky and Va., Ala., La., and Miss., south of 31°; Tex E. of 100°; S. of 31° Fla.; also Me., N. H. and Vt. in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark. E. of 98° Ga.; Iowa (except Davenport) Minn. Mo. (except St. Louis) Neb E. of 98° N. C., S. C., Tenn and Tex. N of 31° and E. of 100° (except Wichita Falls); also Ala. La. and Miss. No of 31°; (3) Ark W. of 96°, Kan., Neb W. of 98° N. D., Okla., S. D. Tex., W. of 100° (including Wichita Falls excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso Tex.

Sodium sesquisilicate, anhyd., bgs., c.l., t.l., works 100 lbs. 5.70 • —
dms., c.l., t.l., works 100 lbs. 6.20 • —
Hydrated, bgs., c.l., works 100 lbs. 5.00 • —
bgs., 6,000-19,900 lb. lots, works, 100 lbs. 5.35 • —
dms., c.l., works 100 lbs. 5.50 • —
dms., 6,000-19,900 lb. lots, works, 100 lbs. 5.85 • —
Sodium silicate, liq., 40° Be. 1:3.2, turbid, dms., c.l., works 100 lbs. 1.65 • —
dms., l.c.l., works 100 lbs. 1.90 • 2.40
tanks, works 100 lbs. 1.20 • —
47° Be., 1:2.9, turbid, dms., c.l., works 100 lbs. 2.25 • —
dms., l.c.l., works 100 lbs. 2.60 • 3.45
tanks, works 100 lbs. 1.90 • —
52° Be., 1:2.4, turbid, dms., c.l., works 100 lbs. 2.65 • —
dms., l.c.l., works 100 lbs. 3.00 • 3.50
tanks, works 100 lbs. 2.30 • —
Solid, 1:3.2, bgs., works ton.67.50 • —
Sodium silicofluoride, bgs., c.l., works lb. .065 • —
bgs., l.c.l., works lb. .725 • —
Sodium silicofluoride in dms. 0.4c. per lb. higher.
Sodium stannate, dms., works, frt. alld. E. lb. .638 • .697
Sodium sulfa drugs (see Sulfa name).
Sodium sulfanilate, bbls., works lb. .22 • —
Sodium sulfate, NF VII, dried, powd., dms lb. .22½- —
Tech., anhyd., bgs., c.l., divd. E. ton.54.00 • —
Tech., detergent, rayon grade, bgs., c.l., works ton.36.00 • —
bulk, c.l., works ton.32.00 • —
USP, cryst., fib. dms. lb. .17½- .18
Sodium sulfhydrate, flake, 70-72%, dms., c.l., works frt. equald. lb. .07¼- —
dms., l.c.l., same basis lb. .08¼- —
Liq., 40-44%, tanks, works, 100% basis ton.130.00 • —
Sodium sulfide, flake, dms., c.l., works, E., frt. equald lb. .06 • —
dms., l.c.l., same basis lb. .07 • —
Fused, bbls., c.l., works, E., frt. equald lb. .05½- —
bbls., l.c.l., same basis lb. .06½- —
Sodium sulfite, anhyd., powd., bgs., c.l., works 100 lbs. 7.55 • —
bgs., l.c.l., same basis 100 lbs. 7.95 • —
Tech., anhyd., bgs., c.l., works, 100 lbs. 3.50 • —
bgs., t.l., same basis 100 lbs. 4.00 • —
Sodium sulfocyanide, CP (see Sodium thiocyanate).
Sodium tetraborate (see Borax)
Sodium tetrasulfide, liq., 40% dms., c.l., works, frt. equald lb. .04½- —
dms., l.c.l., same basis lb. .05½- —
Sodium thiocyanate, CP, dms lb. .55 • .65
Tech., anhyd., dms., 1 ton lots or more, works lb. .317 • —
dms., less than ton lots, works lb. .337 • —
Sodium thiosulfate, NF, cryst. bbls. lb. .13½- —
Tech., anhyd., 100-lb. bgs., c.l., t.l., frt. equald 100 lbs. 7.75 • —
100-lb. bgs., l.c.l., l.t.l., frt. equald 100 lbs. 8.15 • —
Tech., anhyd., photo grade, 64-lb. bgs., c.l., t.l., frt. equald. lb. .0775- —
64-lb. bgs., l.c.l., l.t.l., frt. equald lb. .0815- —
Tech., pentahydrate, photo grade, 100-lb. bgs., c.l., t.l., frt. equald 100 lbs. 4.95 • —
100-lb. bgs., l.c.l., l.t.l., frt. equald 100 lbs. 5.20 • —
Sodium titanate, ctns., c.l., works, lb. .14¼- —
ctns., 5-ton lots, works lb. .14½- —
ctns., 1-ton or less, works lb. .14¾- —
Sodium trichloroacetate, 80%, 100-lb. dms., c.l., frt. alld E. lb. .33 • —
50-lb. dms., c.l., frt. alld. E lb. .35¼- —
10-lb. ctns., c.l., frt. alld E. lb. .42 • —
Prices on Sodium trichloroacetate W. of the Rockies are 1¾c. per pound higher.


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METASILICATE
(CRYSTAMET)
Is Freer Flowing

Crystamet is the sodium metasilicate pentahydrate with smoother, more uniform, pure white particles. This means Crystamet is dust-free, easier to handle and use, more resistant to caking, compounds better. Write for a free sample of Crystamet 2040, or the coarser 1020 or finer 3080 grades, and a technical data sheet. Just mail request on your company letterhead.

1885—75th Anniversary—1960
Cowles CHEMICAL COMPANY
7018 Euclid Avenue • Cleveland 3, Ohio

| | | | |
|---|---|---|---|
| Sodium tripolyphosphate, bgs., c.l., works, frt equald | 100 lbs. | 8.16 | — |
| bgs., l.c.l., same basis | 100 lbs | 8.56 | 9.06 |
| Sodium trisilicate, powd., 1:3.2, bgs., c.l., works | 100 lbs | 8.95 | — |
| bgs., l.c.l., works | 100 lbs | 9.70 | -13.13 |
| dms., c.l., works | 100 lbs. | 9.45 | — |
| dms., l.c.l., works | 100 lbs. | 10.20 | -10.60 |
| Sodium tungstate, tech., kgs. dlvd. E | lb. | 1.09 | — |
| Sodium-ammonium phosphate, purif., cryst., dms., works | lb. | .52 | — |
| Sodium-carboxymethyl cellulose (see CMC). | | | |
| Sodium-cinchophen (see Cinchophen-sodium). | | | |
| Sodium-formaldehyde sulfoxylate, dms., c.l., dlvd | lb. | .21 | — |
| dms., l.c.l. same basis | lb. | .21½ | — |
| Sodium-zirconyl sulfate, fib. dms., 1,000-lb. lots or more works | lb. | .28 | — |
| fib., dms. smaller lots, same basis | lb. | .30 | — |
| Solvent naphtha, coaltar, high-flash, tanks, frt. equald | gal. | .30 | .35½ |
| Solvent naphtha, petroleum, straight aromatic, 310°F-360°F b.r., 14°-16°C m.a.p., tankcars, New Jersey and New York | gal. | .31 | — |
| Houston, Texas | gal. | .29 | — |
| 355°F-420°F b.r., 17°-18°C. m.a.p., tankcars, New Jersey and New York | gal. | .32 | — |
| Houston, Texas | gal. | .30 | — |
| Solvent naphtha, petroleum, partial aromatic, 211°F-265°F b.r., 31°C. m.a.p., tankcars New Jersey and New York | gal. | .235 | — |
| 286°F-340°F b.r., 22°C m.a.p., tankcars New Jersey and New York | gal. | .275 | — |
| 319°F-380°F b.r., 27°C m.a.p., tankcars, New Jersey and New York | gal. | .285 | — |
| 322°F-395°F b.r., 28°C. m.a.p., tankcars, New Jersey and New York | gal. | .295 | — |
| Sorbitan monostearate, fib. dms., 20,000-lb. lots, works | lb. | .33 | — |
| fib. dms., 10,000 to 20,000-lb. lots, works | lb. | .35 | — |
| fib. dms., smaller lots, works | lb. | .38 | .40 |
| Sorbitan tristearate, fib. dms., 20,000-lb. lots, works | lb. | .34 | — |
| fib. dms., 10,000 to 20,000-lb. lots, works | lb. | .36 | — |
| fib. dms., smaller lots, works | lb. | .39 | .41 |
| Sorbitol, NF, reg., 70% aqueous, dms., c.l., works | lb. | .18 | — |
| dms., l.c.l., works | lb. | .19 | — |
| tanks, works | lb. | .16¼ | — |
| Cryst., resin grade, pellets, dms., c.l., works | lb. | .23 | — |
| dms., 1 to 5-ton lots, works, | lb. | .25 | .26 |
| Sorbitol, powd., dms., c.l., works, | lb. | .36 | — |
| dms., 1 to 5-ton lots, works, | lb. | .38 | .39 |
| Soln., comi., aqueous, dms., c.l., works | lb. | .24½ | — |
| dms., ton lots, works | lb. | .25 | — |
| dms., smaller lots, works | lb. | .25½ | — |
| tanks, works | lb. | .23¼ | — |
| Soya protein, chemically isolated, old process, bgs., c.l., works, | lb. | .23 | — |
| bgs., l.c.l., works | lb. | .23¼ | .23½ |
| Chemically isolated, new process, bgs., c.l. works | lb. | .20 | — |
| bgs., l.c.l., works | lb. | .20¼ | .20½ |
| Soybean meal, 44%, bulk, unrestricted, Decatur | ton. | 56.00 | — |
| Soybean oil, crude, tanks, Decatur, | lb. | .0745 | .07½ |
| Foots, soapstock, acid 95%, tanks, N. Y. | lb. | .05½ | — |
| Refd., alkali, dms. | lb. | .1180 | .1200 |
| tanks | lb. | .0980 | — |
| clarified, dms. | lb. | .1130 | .1150 |
| tanks | lb. | .0930 | — |
| salad, dms. | lb. | .1145 | .1160 |
| tanks | lb. | .0945 | — |
| Soybean oil acids, dbl. dist., dms., | lb. | .18 | .20½ |
| tanks | lb. | .15½ | — |
| S. D., dms | lb. | .16¾ | .19¼ |
| tanks | lb. | .14¼ | — |
| Sparteine sulfate, cns., 100 oz. or more | oz. | .80 | — |
| Spearmint leaves, dom. bls. | lb | 75 | — |
| Spearmint oil, NF, dms. | lb. | 9.00 | -11.23 |
| Sperm oil, bleached, winter, 45°, dms. | lb. | .1475 | .1575 |
| tanks | lb. | .1275 | — |
| Nat., winter, 45°, dms. | lb. | .1375 | — |
| tanks | lb. | .1175 | — |
| Spermaceti wax, blocks, cs. | lb. | .31 | .33 |
| Cakes, cs. | lb. | .32 | .34 |
| Spruce oil cns., dms. | lb. | 2.10 | 3.55 |
| Squill, white, bls | lb. | .16 | .18 |
| Powd., bbls., bxs. | lb. | .17 | .20 |
| St. John's bread, edible bls. | lb. | .17 | — |
| Stannic chloride, anhyd., dms., works | lb. | .808 | .830 |
| Stannic oxide, dms., dlvd. | lb. | 1.07½ | 1.08¼ |
| Stannous chloride, anhyd dms., works | lb. | 1.001 | 1.256 |
| Hydrous, cryst., dms., works | lb. | .86½ | .87½ |
| Stannous sulfate, dms., works | lb. | 1.036 | 1.076 |
| Star root (see Helonias root). | | | |
| Stargrass root (see Aletris root). | | | |
| Stavesacre seed, bgs | lb. | .60 | .61 |
| Stearic acid, dbl., pressed bgs. | lb. | .15¾ | .18¼ |
| Single-pressed, bgs. | lb. | .15½ | .17¾ |
| Triple-pressed, bgs. | lb. | .17½ | .20 |
| Stearine, oleo (see Oleostearine) | | | |
| Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York | gal. | .18 | — |
| tanks, Houston | gal. | .1475 | — |
| tanks, group 3 | gal. | .12875 | — |
| Stramonium leaves, bgs. | lb. | .13 | — |
| Streptomycin hydrochloride, bulk, | gram. | .04 | .041 |
| Streptomycin sulfate, bulk | gram. | .04 | .041 |
| Strontium bromide, NF, cryst., 100-lb. dm., f.o.b. E. | lb. | .92 | — |
| Strontium carbonate, pure, dms., 5-ton lots or more, works | lb. | .35 | — |
| dms., 1-ton lots, works | lb. | .37 | — |
| Tech., dms., works | lb. | .19 | — |
| Strontium chromate fib. dms., dlvd. | lb. | .48 | — |
| Strontium iodide, jars, 25-lb. lots. | lb | 3.57 | — |
| Strontium nitrate, bgs., c.l., works. | 100 lbs. | 11.00 | — |
| bgs., l.c.l., works | 100 lbs. | 12.00 | — |
| Strontium salicylate, NF, dms. | lb | 1.88 | — |
| Strontium sulfate, air floated, 90%, 325 mesh, bgs., works | ton. | 56.70 | -66.15 |
| Strophanthin G (see Ouabain, USP). | | | |
| Strophanthin K, bots. | oz. | 25.00 | -25.50 |
| Strophanthus seed, Kombi, biologically tested, bgs | lb | 3.50 | 3.75 |
| Styrax gum, USP cs | lb. | 4.50 | 5.50 |
| Styrene monomer, polymer grade, 99.6% dms. c.l. frt. alld. | lb. | .17 | — |
| dms., c.l., same basis | lb. | .19 | — |
| tanks, same basis | lb. | .14½ | — |
| Styrene monomer, tech., 99.2%, dms., c.l. | lb. | .1467 | — |
| dms., l.c.l., same basis | lb. | .1667 | — |
| tanks, bulk, same basis | lb. | .1217 | — |

Above prices are escalated for each calendar quarter on the basis of cost of crude oil at the well, cost of petroleum refining labor, and prices in the three major sections of the Wholesale Commodity Price index.

| | | | |
|---|---|---|---|
| Styrolyl acetate, bots. | lb. | 1.25 | 1.45 |
| Succinic acid., purif., cryst., dms., t.l., frt. alld. | lb. | .62 | — |
| dms., l.t.l., same basis | lb. | .63 | .75 |
| Succinic anhydride, dms., c.l., t.l., dlvd. | lb. | .51 | — |
| dms., l.c.l., same basis | lb. | .52 | — |
| Sucrose, refd., white, bgs., refy. | lb. | .0935 | — |
| Sucrose acetate isobutyrate, 90°c., dms., t.l., dlvd. | lb. | .33½ | — |
| dms., l.t.l., same basis | lb. | .35 | — |
| tanks, same basis | lb. | .31 | — |
| 100%, t.l., dms., dlvd. | lb. | .35½ | — |
| l.t.l., dms., same basis | lb. | .37 | — |
| Sucrose octa-acetate, denaturing grade, 100-200-lb. lots, bgs., l.c.l. works | lb. | 1.00 | — |
| Sugar (see Sucrose). | | | |
| Sugar cane wax, dom., refd., slabs, 80-lb. ctns. works | lb. | .60 | .65 |
| 80-lb. ctns., spot | lb. | .65 | .75 |
| Sulfabenzamide dms | kilo | 8.80 | 9.90 |
| Sulfabenzamide-sodium dms. | kilo | 9.00 | -10.10 |
| Sulfacetamide, USP, fib dms | kilo. | 6.61 | 6.83 |
| Sulfacetamide-sodium, USP, fib. dms | kilo | 8.15 | 9.25 |
| Sulfadiazine, USP, microcrystals, dms | kilo. | 23.35 | -24.45 |
| USP, powd. dms. | kilo. | 22.60 | -23.70 |
| Sulfadiazine-sodium, USP dms | kilo. | 24.80 | 25.90 |
| Sulfaguanidine, NF X, dms | kilo | 5.50 | 6.60 |
| dms | kilo. | 23.50 | -24.60 |
| Sulfamerazine-sodium, USP, powd., dms | kilo. | 24.80 | -25.90 |
| Sulfamethazine, USP XV, microcrystals, dms | kilo. | 19.65 | -20.75 |
| USP XV, powd., dms | kilo. | 18.75 | -19.85 |
| Sulfamic acid, cryst., dms., c.l., t.l., works | 100 lbs. | 16.00 | — |
| dms., l.c.l., t.t.l., works | 100 lbs. | 17.50 | -18.50 |
| Gran., dms., c.l., t.l., works | 100 lbs. | 14.75 | — |
| dms., l.c.l., l.t.l., works | 100 lbs. | 16.25 | -17.25 |
| Sulfanilamide, NF, reg., 1,000 lb., frt. equald | lb. | 1.50 | — |
| NF, fib. dm., frt. equald | lb. | 1.55 | — |
| Sulfanilamide quinoxaline, veterinary dms | kilo. | 16.28 | — |
| Sulfanilic acid, tech., dms. c.l., frt. alld | lb. | .21 | — |
| dms., l.c.l., frt. alld. | lb. | .23 | — |
| Sulfapyridine, USP XV powd. bots tins | kilo. | 15.45 | -16.55 |
| Sulfapyridine-sodium, monohydrate, dms | kilo | 16.55 | -17.65 |
| Sulfathiazole, NF X, microcrystals, dms | kilo. | 6.25 | 6.90 |
| NF X, powd., dms. | kilo. | 5.50 | 6.15 |
| Sulfathiazole-sodium, NF X, dms., 1,000-lb lots or more | lb | 2.33 | — |
| Sulfur, comi., flour, bgs., mines | 100 lbs | 2.35 | — |
| bbls. mines | 100 lbs | 3.30 | — |
| lump, bgs., mines | 100 lbs | 2.25 | — |
| bbls. mines | 100 lbs | 2.80 | — |
| Sulfur, crude, dom., bright, bulk, f.o.b. cars, mines | long-ton | 23.50 | — |
| Sulfur, crude, export, f.o.b. vessels, Gulf ports, long-ton | | 25.00 | — |
| US and Canada f.o.b. vessels Gulf ports long-ton | | 25.00 | — |
| Domestic dark sulfur prices are $1 per long ton lower | | | |
| Sulfur, crude, imp., Mexican, bulk, filtered f.o.b. vessel, Coatzacoalcos long ton | | 24.00 | — |
| Mexican dark sulfur price is $1 per long ton lower | | | |
| Sulfur, refd., flowers, NF, bgs., mines | 100 lbs | 5.65 | — |
| bbls., mines | 100 lbs | 7.00 | — |
| flour, light, bgs., mines | 100 lbs. | 5.25 | — |
| bbls., mines | 100 lbs | 6.25 | — |
| lump, bgs., mines | 100 lbs. | 4.95 | — |
| rolls, bgs., mines | 100 lbs | 5.50 | — |
| bbls., mines | 100 lbs. | 6.25 | — |
| salt block, bgs., mines | 100 lbs. | 4.65 | — |
| virgin block, bbls. mines | 100 lbs | 4.70 | — |
| Sulfur, rubbermakers, comi., reg., bgs., mines | 100 lbs | 2.45 | — |
| bbls. mines | 100 lbs | 3.70 | — |
| 98-100%, passing through 325 mesh, bgs., mines | 100 lbs | 2.55 | — |
| bbls., mines | 100 lbs | 3.80 | — |
| refd., bgs., mines | 100 lbs. | 4.90 | — |
| bbls., mines | 100 lbs. | 6.05 | — |
| treated, 2.5% mineral oil, bgs., mines | 100 lbs | 2.75 | — |
| bbls., mines | 100 lbs. | 4.00 | — |

My name's Nosey. I'm the Esso Solvents Expert. And I'm illustrating the fact that Varsol's odor is *down* and its quality *up*.

As you know, odor is hard to control without sacrificing solvent power. That's why Esso has been researching low odor for years. Fact is, we have an Odor Panel composed of experts in all of our refinery and research establishments. These people are dedicated to the continuing improvement of "low odor" Esso Solvents.

Constant research makes it possible to deliver our solvents fresh and uncontaminated from modern, conveniently located terminals. For further information, contact your nearest Esso office or write: Esso Standard, Division of Humble Oil & Refining Company, 15 West 51st Street, New York 19, N. Y. And tell 'em Nosey sent you!

ESSO
VARSOL®

In industry after industry . . . "ESSO RESEARCH works wonders with oil"

## Sulfur Dichloride—Vitamin C

Sulfur dichloride, ret. dms. c.l., works frt equald lb .04½- —
ret. dms., t.c.l. same basis lb. .05¼- —
tanks same basis lb. .04 - —
Sulfur dioxide, liq comL, cyls., works, frt equald lb .10 - .12
multi-unit cars works lb. .0535- —
tanks, works lb. .045 - —
Sulfur dioxide, refrigeration, cyls., dlvd lb. .33 - —
Sulfur monochloride 55-gal non ret. dms. c.l. frt equald lb .04¼- —
dms. t.c.l. same basis lb .04¼- —
tanks same basis lb .04 - —
Sulfuric acid 60° Be cbys., c.l., works 100 lbs 2.00 - —
cbys., t.c.l., works 100 lbs 2.30 - —
tanks works ton 18.60 - —
60° Be cbys c.l., works 100 lbs 2.25 - —
cbys., t.c.l., works 100 lbs 2.55 - 3.35
tanks works ton 22.35 - —
98% tanks, works ton 23.50 - —
99% tanks, works ton 23.70 - —
100% tanks works ton 23.95 - —
CP NF, consumers chys., c.l., frt. equald lb. .12¾ —
consumers' cbys., t.c.l., same basis lb. .14¼- .14¾
5-pt bots. extra cs., c.l. works, frt ald lb 16¼ —
5-pt bots. extra cs t.c.l. same basis lb 17¾ .18¾
Sulfuric acid fuming (oleum) 20% tanks, works ton 25.00 - —
40% tanks, works ton 29.00 - —
65% tanks works ton 39.50 - —
Superphosphate run of-pile under 22% a.p.a., pulv bulk., c.l. Baltimore unit-ton .90 .93
bulk, c.l., Carteret, N J unit-ton .90 - .93
bulk, f.o.b vessel unit-ton 1.02 - —
Superphosphate triple 48% or more a.p.a, pulv bulk c.l., East Tampa, Fla unit-ton .98 - —
Sweet birch oil, USP, northern, cns lb 4.00 9.50
USP southern, cns lb 2.00 3.05

## T

2,4,5-T dms. c.l. works frt equald. lb 1.18 - —
dms. t.c.l. same basis lb 1.25 - —
2,4,5-T isopropyl ester, dms., c.l., works frt equald lb 1.24 - —
dms. t.c.l. works lb 1.29 - —
Talc, dcm., fibrous, grd., bgs., c.l., works, New York ton.28.00 - —
bgs. t.c.l., works ton.31.00 -36.00
fibrous, 99.5%, 325 mesh, bgs., c.l., works, New York ton.31.00 - —
bgs. t.c.l., works ton 34.00 - —
fibrous, 99.95%, 400 mesh, micronized bgs., c.l., works ton.38.00 - —
625 mesh micronized, bgs. c.l. works ton.80.00 - —
ord., Calif., grd., bgs., c.l., works ton 34.00 -39.50
Vermont, off-color grd., bgs., c.l., works ton 19.40 - —
bgs. t.c.l. works ton 37.00 - —
Imp., Canadian grd bgs., c.l. mines ton 20.00 -35.00
Tall oil, crude, dms., c.l., works lb. .04½- .04¾
tanks, works lb. .02¾- .03
Dist., depending on grade, dms., c.l., works lb. .07¾- .10
dms., t.c.l., works lb. .08 - .10¼
tanks, works lb. .05¾- .08
Refd., depending upon grade, dms., c.l., works lb. .07¼- .09¼
dms., t.c.l., works lb. .07½- .09¾
tanks, works lb. .05¼- .07¼
Tall oil acids, dms., c.l., works lb. .08¼ .11¾
dms., t.c.l. lb. .08¾- .12¼
tanks, works lb. .06½- .09¾
Tallow, edible, tanks, dlvd lb. .07¾- .08
Inedible, fancy, bleachable, tanks, lb. .05¾- —
fancy, guaranteed, dms., f.a.s. lb. .07½- —
bulk, f.o.b. lb. .06½- —
No. 1, tanks, dlvd. lb. .05½- —
prime, tanks, dlvd. lb. .05⅝- —
special, tanks, dlvd. lb. .05¼- —
sulfonated, 25%, bbls., t.c.l. lb. .08½- .09¾
50%, bbls., t.c.l. lb. .10½- .11
Tallow acids, dist., dms lb. .13¼- .15¾
tanks lb. .10¾- —
Hydrogenated, dms. lb. .14¾- .17¼
Tallow oil acidless, dms. c.l. lb. .13½ Nom.
dms., t.c.l. lb. .14½ .16
Tangerine oil, Florida, dms lb. 3.75 - 4.75
Tankage, animal, feeding 9-11% ammonia, New York bulk, unit-ton. 4.75 - 5.00
Animal, feeding, 9-11% ammonia, Chicago, bulk unit-ton. 5.25 - —
Tannic acid NF fluffy bbls, 1,000-lb lots lb 2.05 - —
bbls., smaller lots lb 2.06 2.07
NF, powd., bbls., 1,000-lb. lots lb 1.95 - —
bbls., smaller lots lb 1.96 1.99
Tech, dms lb 1.05 —
Tansy oil, dms lb. 6.60 8.00
Tar acid oil, 15-18% dms., c.l., frt equald gal. .53½- —
dms., t.c.l., same basis gal. .55½- —
tanks, same basis gal. .43½- —
25-28% dms. c.l. same basis gal. .60 - —
dms., t.c.l. same basis gal. .62 - —
tanks, same basis gal. .50 - —
50-53%, dms., c.l., same basis gal. .75 - —
dms., t.c.l., same basis gal. .77 - —
tanks, same basis gal. .65 - —
Tar coal (see Coaltar)
Tartar emetic (see Antimony potassium tartrate)
Tartaric acid, NF, 100-lb bgs., c.l., frt equald lb. .41 - —
bgs., 10,000 lbs., 1 shipt., same basis lb. .43 - —
bgs., smaller lots, same basis lb. .47 - —
Terpine hydrate, NF, cryst., powd., 100-lb fib dms lb. 70 - —
Terpineol, extra, dms. lb. .50 - .60
Prime, dms. lb. .40 - .50
Terpinyl acetate, extra, cns., dms. lb. .64 - 75
Prime, dms. lb. .53 - 56
Terpinyl propionate dms. lb 1.75 3.00
Terra alba (see Gypsum).
Testosterone USP, bots. gram. No prices.
Testosterone proprionate USP bots. gram. No prices.
Tetrachloroethane, dms. works lb. .14½ —
Tetrasodium pyrophosphate (see Sodium pyrophosphate)
Tetrachloroethylene tech (see Perchloroethylene)
Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l., works lb. .20¼- —
dms., t.c.l., works lb .22 .23½
Tetraethyl orthosilicate, dms., c.l., dlvd. E lb. .60 - —
dms., t.c.l., dlvd E. lb. .61½- —
Tetraethyl pyrophosphate, 40%, cns., dms., frt equald lb. .75 - —
Tetraethylenepentamine dms., c.l., dlvd E lb. .53¼- —
dms., t.c.l., dlvd. E. lb. .55 - —
tanks, dlvd E lb. .51 - —
Tetraethylthiuram disulfide, tech., dms., frt ald lb. 1.04 - —
Tetrahydrofuran, dms. c.l., t.l., works lb. .36½- —
dms., t.c.l., or t.t.l., works lb. .37 - —
tanks, works lb. .35 - —
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn. lb. .31½- —
dms., t.c.l., Memphis, Tenn. lb. .32½- —
dms., c.l., t.l., Newark, N.J lb. .33½- —
dms., t.c.l., Newark, N.J lb. .34½- —
tanks dlvd E. of Denver lb. .31 - —
tanks dlvd W of Denver lb. .32 - —
Tetrahydrophthalic anhydride, dms., c.l., t.l., frt. ald. E lb. .39 - —
t.c.l., t.t.l., same basis lb. .41 - —
Tetrapotassium phosphate (see potassium phosphate)
Thallium metal dlvd lb 7.50 -10.00
Thallium sulfate 99% bots. dlvd. lb 5.00 -10.00
Theobromine, NF, fib. dms., 100-lbs., f.o.b., works lb. 5.50 - —
Theobromine and sodium acetate, USP, fib. dms., 500-lbs. works. lb. 6.45 - —
Theobromine sodio-salicylate, NF, fib. dms., 500-lbs., works lb. 5.45 - —
Theophyline, USP, anhyd., 100-lb. dms., frt. ald lb. 3.65 - —
Thiamine hydrochloride, USP, fib. dms., frt. alld kilo. 36.00 - —
USP, ampule grade, fib. dms., frt alld kilo. 38.00 - —
Thiamine mononitrate, USP, fib dms., frt. alld kilo. 36.00 - —
Thiocarbanilide, dms., ton lots lb 72 - —
dms., less ton lots lb. 74 - —
Thiodiphenylamine (see Phenothiazine).
Thioflavin green toner, brilliant, molybdated, PMA, bgs., works lb 5.20 - —
Tungstated, PTMA, kgs., works. lb. 6.20 - —
Thioglycolic acid, refd., 55 gal. dms., ton lots, 100% basis lb. 1.15 - —
Thiosalicylic acid, 80%, dms., 1,000-lb., lots, works lb 4.00 - —
Thiourea, tech., bgs., t.l. frt. alld. lb. .30 - —
bgs., ton lots, same basis lb. .32 - —
bgs., less than ton lots, same basis lb. .33 - —
Thorium nitrate, purif., fib dms., 100-lb lots or more, works lb 3.50 - —
dl-Threonine bots. 1-kilo lots kilo 275.00 - —
Thyme leaves, French bgs lb 29 - —
Spanish, bgs. lb .14 - —
Thyme oil, NF, red, cns., dms lb. 1.90 - 2.25
NF, white, cns lb. 2.20 - 2.60
Tech white cns lb .40 1.85
Thymol, fib. dms., 25-lbs., f.o.b. works. lb. 3.06 - —
Thymol iodide, NF, dms., 100-lbs. f.o.b. works lb. 7.40 - —
Timbo root (see Cube root)
Tin chloride (see Stannous chloride, anhyd.)
Tin crystals (see Stannous chloride, hydrous)
Tin metal (Straits) lb. 1.01 - —
Tin oxide (see Stannic oxide)
Tin sulfate (see Stannous sulfate).
Tin tetrachloride anhyd (see Stannic chloride anhyd.)
Titanium dioxide, anatase, ceramic, bgs., c.l., dlvd lb. 25½- —
bgs., t.c.l., dlvd lb. 26½- —
reg., bgs., c.l., dlvd lb. 25½- —
bgs t.c.l. dlvd lb. 26½- —
metallurgical, nat., bgs., c.l., f.o.b Jacksonville Fla ton.180.00 - —
bgs., 5-ton lots Niagara Falls, N Y ton.205.00 - —
bgs. ton lots same basis ton.215.00 - —
Milled metallurgical titanium dioxide $7.50 per ton higher.
Titanium dioxide, rutile, non-chalking, bgs., c.l., dlvd. E lb. .27½- —
bgs. t.c.l., dlvd. E lb. .28½- —
Titanium dioxide-calcium pigment, 30% Ti $O_2$, reg., bgs., c.l., dlvd lb. .09⅜- —
bgs. t.c.l. works lb. .09⅞- —
50% Ti $O_2$, high-tinting dms. c.l. lb. .14⅜- —
dms. t.c.l lb. .14⅞- —
Titanium hydride, powd., dms., works lb 8.10 9.00
Titanium tetrachloride, tech., dms., c.l., works lb. .26 - —
dms., t.c.l., works lb. .27½- .29
tanks, works lb. .20 - —
Tobias acid dms., c.l., t.l. lb. .78 - —
dms., t.c.l. lb. .81 - —
d-a Tocopherols, NF, mixer, conc., pure basis bots kilo.67.00 - —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo.122.00 - —
d-a-Tocopheryl acid succinate, cryst., bots kilo 109.00 - —
dl-a-Tocopherol, bots kilo.99.00 - —
d-a-Tocopheryl acetate bots kilo.90.00 —
25% dry, powd., bots. kilo.22.50 -24.00
33⅓ dry powd., bots. kilo.30.00 -31.50
p-Tolidine base, dry, kgs., 100% basis lb 1.55 - —
Paste kgs. 100% basis lb 1.50 - —

### TOLUOL

**Toluol quotations, both coaltar and petroleum, may be found under Toluene.**

o-Tolidine hydrochloride, paste, kgs., 100% basis lb 1.50 - —
Tolu balsam, cns lb. 3.50 - 3.75
Toluene, coaltar, industr., or nitration tanks, dlvd E of Rockies gal. .25 - —
Toluene, petroleum industr., tanks, dlvd E of Rockies gal. .25 - .32
p-Toluenesulfonamide, powd., dms., t.l., works lb. .60 - —
dms., t.t.l., same basis lb. .63 - —
Toluenesulfonic acid, dms., c.l., t.l., works lb. .17 - —
dms., t.c.l., works lb. .18 - —
p-Toluenesulfonic acid monohydrate, dms., c.l. or t.l. lb. .90 - —
dms., 125 lbs. to t.l. lb. 1.00 - —
m-Toluidine, dms., c.l., works, frt. alld lb. .83 - —
dms., t.c.l., same basis lb. .84 - —
tanks, same basis lb. .82 - —
o-Toluidine, dms., c.l., works, frt. alld lb. .30 - —
dms., t.c.l., same basis lb. .31 - —
tanks, same basis lb. .28 - —
p-Toluidine, tech., flake, dms., frt. alld lb. .50 - —
Cast, dms, frt. alld lb. .45 - —
p-Toluidine-m-sulfonic acid, dms., works lb. .92 - 1.04
Toluidine red toner, deep shades, kgs., works lb. 1.70 - —
Light shades, kgs., works lb. 1.70 - —
2,4-Tolylenediamine, cryst., fib. dms., t.c.l., frt alld lb 1.10 - —
Tonka beans, Angostura, cks. lb. 1.50 - —
Brazilian, Surinam, cs. lb. 1.30 - —
Totaquine, 100-oz. lots, cns. oz. .42 - —
Toxaphene, dms. c.l., t.t., works. lb .22 - —
dms., t.c.l., t.t., works lb .28 - —
Tragacanth gum, No. 1, ribbons, cs lb. 3.60 - 3.75
No. 2, cs lb. 3.40 - 3.60
No. 3, cs lb. 3.15 - 3.25
USP powd., bbls. lb. 1.05 - 1.15
Triacetin dms., c.l., dlvd. E. of Rockies lb. .39 - —
dms., t.c.l., same basis lb. .40 - —
tanks, same basis lb. .37 - —
Triallylamine, dms., c.l., dlvd. lb .985 - —
dms., t.c.l., dlvd. lb. .995 - —
tanks, dlvd. lb. .96 - —
Tributyl citrate, tech., non-ret. dms., c.l., frt alld E of Denver, lb. .42½- —
non-ret dms., t.c.l., frt. alld. E. of Denver lb. .43½- —
tanks, frt alld E of Denver lb. .40 - —
Tributyl phosphate, dms. c.l., works, lb. .52½- —
dms., t.c.l., same basis lb. .53½- —
tanks, same basis lb .50 - —
Tributylamine dms., c.l., works lb .67½- —
dms., t.c.l., same basis lb .69 - —
tanks, same basis lb .65 - —
Tributyrin, dms., t.c.l., dlvd. lb. .69 - —
Trichloroacetic acid, bots. lb 2.00 2.50
Trichlorobenzene, dms., c.l., frt. alld. E lb. .15 - —
dms., t.c.l., frt. alld E. lb. .16 - —
tanks, frt. alld. E. lb. .13¼- —
Trichlorobenzene prices in the West 1¾c. higher.
1,1,1-Trichloroethane, dms., c.l., dlvd. lb. .13¼- —
dms., t.c.l., dlvd. lb. .14¼- —
tanks, dlvd. lb. .12¼- —
1,1,2-Trichloroethane, dms., c.l., works lb. .13½- —
dms., t.c.l., dlvd. E. lb. .14¼- —
tanks, works lb. .11½- —
Trichloroethylene, dms., c.l., or t.l., works, frt. equald lb. .13 - —
dms., t.c.l., frt. alld. lb. .15 - .16¾
tanks, works, frt. equald. lb. .12 - —
Trichloroisocyanuric acid, dms., c.l., t.l., frt, equald lb. .65 - —
dms., t.c.l., same basis lb. .75 - —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate, 65% soln., ret chys. works, frt adjusted. lb 1.40 - 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .35 - —
dms., t.c.l., dlvd. lb. .36 - —
tanks, dlvd lb. .32½- —
Tricresyl phosphate, petroleum, dms., c.l., dlvd. lb. .34½- —
dms., t.c.l., dlvd lb. .35½- —
tanks, dlvd lb. .32½- —
Tridecyl alcohol, mixed isomers, dms. c.l., dlvd. E lb. .26½- —
dms., t.c.l., dlvd. E lb. .28 - —
tanks, dlvd E lb. .24 - —
Triethanolamine dms. c.l., dlvd E. lb. .24½- —
dms., t.c.l., same basis lb. .26 - —
tanks, same basis lb. .22 - —
Triethanolamine lauryl sulfate, dms., c.l., t.l., frt. alld lb. .25½- —
dms., t.t.l., frt. alld. lb. .26½- —
tanks, frt. alld lb. .24½- —
Triethylamine, dms., c.l., dlvd E. lb. .50 - —
dms., t.c.l., same basis lb. .51½- —
tanks, same basis lb. .47½- —
Triethyl citrate, refd., tech., non-ret dms., c.l., frt alld E. of Denver lb. .46¼- —
non-ret dms., t.c.l., frt. alld. E of Denver lb. .47¼- —
tanks, frt. alld. E. of Denver lb. .43¾- —
Triethyl phosphate, dms., c.l., dlvd. lb. .40½- —
dms., t.c.l., dlvd. lb. .41½- —
tanks, dlvd. lb. .38 - —
Triethylene glycol, dms., c.l., dlvd. E lb. .21 - —
dms., t.c.l., dlvd. E. lb. .22½- —
tanks, same basis lb. .18½- —
Triethylenetetramine, dms., c.l., dlvd. E lb. .51¼- —
dms., t.c.l., dlvd. E. lb. .53 - —
tanks, dlvd E lb. .49 - —
Triisobutylene, tanks, dlvd lb. .08 - —
Triisopropanolamine, dms., c.l., dlvd. E lb. .23¼- —
dms., t.c.l., dlvd E. lb. .24¾- —
tanks, dlvd E lb. .20¾- —
Trimethylamine, anhyd., cyls., t.c.l., frt equald, 100% basis lb. .30 - .305
tanks, frt. equald, 100% basis. lb. .26 - —
25-40% soln., dms., c.l., frt. equald, 100% basis lb. .35 - —
dms., t.c.l., frt. equald, 100% basis lb. .35½- —
tanks, 100% basis, frt. equald lb. .26 - —
Trimethylolpropane, dms., c.l., t.l., dlvd. E lb. .35 - —
dms., t.c.l., t.t.l., same basis lb. .36 - —
Trioxane, pure, dms., c.l., t.l., works. lb. .50 - —
dms., t.c.l., works lb. .51½- —
Tripentaerythritol, bgs., c.l., t.l., dlvd. E lb. .40 - —
bgs. t.c.l., t.t.l., dlvd E. lb. .41 - —
Triphenyl phosphate, bbls., c.l., frt equald lb. .41½- —
bbls. t.c.l. frt. equald lb. .43½- —
Triphenylguanidine, bbls., works lb. 90 - —
Tripropylene, dms., c.l., dlvd. E gal. .44 - —
dms., t.c.l., same basis gal. .54 - —
tanks, same basis gal. .28 - —
Tripropylene glycol dms., c.l., t.l., frt, alld. E lb. .20½- —
dms., t.c.l., t.t.l., frt. alld. E lb. .22 - —
tankcars and compartmented tankcars, frt. alld. E lb. .17½- —
Tripropylene glycol, tankwagon and compartmented tankwagons, 1,000 gals. min., frt. alld. E. lb. .18 - —
Tripropylene glycol prices 1c. per lb higher in West.
Trisodium phosphate (see Sodium phosphate tribasic)
dl-Tryptophane, fib., dms., works. lb 55.00 - —
Tung oil, dms., c.l., New York lb. .23½- —
dms., t.c.l., New York lb. .24 - .24½
tanks, imported, N. Y. lb. .21½- —
tanks, domestic, mills lb. .21¼ Nom.
Tungsten metal, powd., 2.0-2.5 microns, dms., works lb. 4.25 - —
Tungstic acid, tech., dms., 1,000-lb. lots, works lb. 2.25 - —
dms. smaller lots, works lb 2.45 - —
Turkey red, bbls., works lb. .62 - —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine oil, NF, cns., dms lb. .33 - .39
Tuscan red, bbls, frt. equald lb. .26 - .33
Tyrothricin, USP, 1 to 5 kilos gram. .54 - —

## U

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., dlvd. E. of Rockies lb. .35 - .35¼
Jobbing types, bbls., same basis lb. .19 - —
Regular types, dry, bbls., same basis lb. .22½- .35
Ultramarine blue prices 1c. higher W of Rockies.
Umber pigment, burnt, American, bgs., c.l., works lb. .07½- .07¾
bgs., t.c.l., works lb. .07¾- .08
Turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y. lb. .08¼- —
Raw, American, bgs., works lb. .07¾- .08¼
Turkey-type, bgs., works lb. .08½- .08¾
Undecylenic acid, dms lb. 1.28 - —
Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea, 46% N, indust., bgs., c.l., t.l., dlvd E ton.125.00 - —
bgs., t.c.l. dlvd E ex whse. ton.145.00 - —
45% N, agricultural, bgs., c.l., (30 tons) dlvd E ton.103.00 - —
Urea-ammonia liquor, A, B, C & F grades, N basis, tanks, frt. equald ton.120.00 - —
37 grade, tanks, same basis ton.145.00 - —
Urethane, USP, dms. t.l., f.o.b., works lb 65 - —
dms., t.t.l., same basis lb 70 - —
Uva-ursi leaves, bls lb .12 - —

## V

Valerian root, Belgian, bgs. lb. .32 - —
Indian, bgs. lb 25 - —
dl-Valine, dms., works lb.21.00 -27.50
Vanadium pentoxide, tech., dms., works lb 1.28 - 1.33
Vandyke brown, bbls., works lb .09½- .12
Vanilla beans, Bourbon, tins lb.14.25 - —
Mexican, cuts, tins lb.14.25 - —
whole, tins lb.14.75 - —
Vanillin, ex lignin, 100-lb fib dms., 1,000-lb. lots or more lb. 3.00 - —
100-lb fib. dms., 500-lb lots lb 3.10 - —
100-lb. fib dms., cns., 100-lb. lots lb 3.25 3.35
Venetian red, jobbing, bgs., works. lb. .0475- —
Venetian red, 20% bgs., works lb. .0525- —
25% bgs., works lb .0575- —
30% bgs., works lb .06 - —
35% bgs. works lb .0625- —
40% bgs. works lb .0675 - —
Vetiver oil, Bourbon, cns. lb.16.50 -17.50
Haitian, cns. lb.14.00 -15.50
Victoria blue toner, molybdated, PMA 250-lb bbls., dlvd E. of Rockies lb. 4.50 - 4.95
Tungstated, PTMA, 250-lb. bbls., dlvd, E. of Rockies lb. 5.55 - —
Victoria blue toner, bbls., prices 1c. higher W of Rockies
Vinyl acetate monomer, zone 1, 55-gal dms., c.l. dlvd lb. .20 - —
55-gal dms. t.c.l., dlvd lb. .21½- —
tanks, dlvd lb. .17½- —
tanktrucks less than 4,000 gal., dlvd lb. .18 - —
Zone 2, 55-gal. dms. c.l., dlvd lb. .21 - —
55-gal dms., t.c.l., dlvd lb. .24 - —
tanks, dlvd. lb. .18½- —
tankirucks, less than 4,000 gals., dlvd lb. .19 - —
Zone 1 is all continental US except zone 2, zone 2 comprises Ariz., Calif., Idaho, Mont., Nev., Ore., Utah and Wash
Vinyl n-butyl ether, tech., dms., t.c.l., works lb. .50 - —
Vinyl chloride monomer, tanks, works lb. .125 - —
Vinyl ether, USP, anesthesia, bots., 50cc., hospitals bot. 1.12 - —
bots., 75cc., hospitals bot. 1.56 - —
Vinyl ethyl ether, tech, dms., c.l., works lb. .29¼- —
dms., t.c.l., works lb. .30 - —
tanks, works lb. .27½- —
Vinyl propionate monomer, cms., c.l. dlvd lb. .49 - —
dms., t.c.l. same basis lb. .50 - —
tanks, same basis lb. .47 - —
Vinyl trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms. to tanks, works lb. 1.20 - —
1 to 9 dms., works lb. 1.35 - —
tanks, works lb. 1.15 - —
Vinyltoluene, dms., c.l. f.o.b., works. lb. .16½- —
dms., t.c.l., same basis lb. .18½- —
tanks, f.o.b. dest. frt. prepaid lb. .14 - —
Viosterol, in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units. 02½- —
Virginia type red, bbls., works lb. 1.40 - —
Vitamin A acetate, syn., cryst., beads 500,000 A units per gram gram. .07¼- —
Vitamin A acetate, dry, 500,000 units per gram, kilo lots kilo.65.00 - —
325,000 units per gram, same basis kilo 43.88 - —
250,000 units per gram, same basis kilo 33.75 - —
Dry vitamin A acetate in less than kilo lots, $1.25 to $2.50 per kilo higher.
Vitamin A, liq in oil, 1,000,000 A units per gram, 1,000,000 units. .09½- —
Vitamin A palmitate, liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. .09½- —
1,000,000 A units per gram, 1,000,000 units. 09½- —
Vitamin $B_1$ (see Thiamine hydrochloride).
Vitamin $B_2$ (see Riboflavin and Yeast)
Vitamin $B_{12}$, cryst., USP (cyanocobalamin), 1-50 grams, vials, tions gram.120.00 - —
0.1% vitamin $B_{12}$ USP, adsorbed on gelatin 100 and 500-gram bots, on 1-5 kilo dms gram. 1.43 - —
0.1% vitamin $B_{12}$, USP adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms gram. 1.43 - —
Vitamin $B_{12}$, oral grade solids in containers of 1 and 10 gram of $B_{12}$ activity gram.110.00 - —
0.1 percent trituration of cryst. $B_{12}$ with dicalcium phosphate or mannitol, 1-10 kilo.138.00 - —
Vitamin $B_{12}$, 0.1% cobalamin concentrate NF, adsorbed on resin, 500-gram bots., 1-5 kilo dms., frt. alld gram. 1.15 - —
0.1% cobalamin concentrate in gelatin, 1-10 kilo dms. frt. alld gram. 1.15 - —
Vitamin C (see Ascorbic acid).

Vitamin D (see Codliver and Fish-liver oils, Calciferol and Viosterol)
Vitamin $D_2$, dry, 850,000 units per gram, kilo lots kilo 42.50 • —
850,000 units per gram less than kilo lots kilo 45.00 • —
Vitamin E (see a-Tocopherol and Wheat germ oil)
Vitamin G (see Riboflavin).
Vitamin H (see Biotin).
Vitamin K, active (see Menadione).
Vitamin $K_1$, 25 gram bots .. gram. 4.50 —
Violet methyl toner (see Methyl violet toner)
VM&P naphtha (see Naphtha, VM&P, petroleum).

## W

Wahoo root bark, bls. ..... lb. 2.00 • 2.25
Warfarin, 0.5% dms., 50-lb. lots, dlvd lb 1.95 • —
dms., 25-49-lb lots, New York or Chicago lb 2.05 • —
dms., 5-24-lb lots, New York or Chicago lb 2.15 • —
Watchung-type reds bbls lb 1.95 • —

**WAXES**
**Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.**

Wheat germ oil, 5-gal. dms .. gal. 12.25 —
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls ... lb. .21 • .22
White precipitate USP powd. dms., lb 6.55 • —
Whiting (see Calcium carbonate)
Wild cherry bark, thin, nat., bls. lb. .22 • —
Thin, rossed, bls ..... lb. .22 Nom.
Wintergreen oil, USP, nat., northern, cns lb 6.35 • 17.50
USP, nat., southern, cns. .. lb 3.75 • 7.00
Wintergreen oil, syn. (see Methyl salicylate).
Witch hazel bark, bls ..... lb .16 • .17
Witch hazel leaves, bls. ..... lb. .28 • .30
Wollastonite fine, bgs., c.l., works ton 39.50 • —
bgs., l.c.l., ex whse ..... ton 56.00 • —
Medium, bgs., c.l., works .. ton 27.00 • —
bgs., l.c.l., ex whse .... ton 44.00 • —
Wood alcohol (see Methanol).
Wood oil (see Tung oil).
Woolfat, crude (see Degras).
Woolfat, USP (see Lanolin).
Wormseed, Levant, bgs ..... lb. 2.50 • —
Wormseed oil (see Chenopodium oil, NF).
Wormwood oil, cns ..... lb. 4.75 5.00

## X

Xylene, coaltar, indust., tanks, works:
Bethlehem, Pa. ..... gal. .29 • —
Birmingham dist. ..... gal. .29 • —
Chicago dist. ..... gal. .28½ • —
Cleveland dist. ..... gal. .29 • —
Geneva, Utah ..... gal. .29 • —
Johnstown, Pa. ..... gal. .29 • —
Lackawanna, N. Y. ..... gal. .29½ • —
Lone Star, Tex ..... gal. .27 • —
Lorain, Ohio ..... gal. .29 • —
Middletown, Ohio ..... gal. .30 • —
Minnequa, Col. ..... gal. .29 • —
Philadelphia dist. ..... gal. .29 • —
Pittsburgh dist. ..... gal. .29 • —
Sparrows Point, Md. ..... gal. .29 • —
Terre Haute, Ind. ..... gal. .29 • —
Youngstown, Ohio ..... gal. .29 • —
t o b works
Xylene, petroleum, indust., tanks
Bayonne, N. J. ..... gal. .29 • —
Baytown, Tex ..... gal. .27 • —
Charleston, S. C. ..... gal. .29 • —
Chicago, Ill. ..... gal. .28½ • —
Detroit, Mich., dlvd. .. gal. .27½ • .29
Houston, Tex ..... gal. .27 • —
Philadelphia, Pa. ..... gal. .29 • —
Providence, R. I. ..... gal. .30 • —
Sewell's Point, Va. ..... gal. .28 • —
Wood River, Ill ..... gal. .28½ • —
o-Xylene, dms., c.l., works ..... lb. .08 • —
dms., l.c.l. works ..... lb. .09 • —
tanks, works ..... lb. .06½ • —
p-Xylene, dms., c.l., works ..... lb. .20 • —
dms., l.c.l., works ..... lb. .21 • —
tanks, frt. alld. ..... lb. .1645 • —
Xylenol, cryst., 45°-47° C., m.p., dms., l.c.l., works lb. .23 • —
56°-58° C., m.p., dms., l.c.l., works, frt. equald lb. .33 • —
60°-62° C., m.p., dms., l.c.l., same basis lb. .40 • —
Xylenol fraction, b.r. 7°-9° C., dry above 227° C. dms., c.l., same basis gal 1.25 • —
dms., l.c.l., same basis gal 1.30 • —
tanks, same basis .. gal 1.05 • —
b.r. 7°-9° C., dry at or below 227° C., dms., c.l., same basis, gal. 1.35 • —
dms., l.c.l., same basis gal. 1.40 • —
tanks, same basis .. gal 1.15 • —
2,4-Xylidine, tech., dms. frt. alld. lb. 1.15 • —
2,5-Xylidine, tech., dms. frt. alld. lb. 1.20 • —
Xylidines, mixed, o-m-p, dms., c.l., or t.l., works lb. .39 • —
dms., l.c.l., same basis ..... lb. .40 • —
tanks, same basis lb .38 • —

**XYLOL**
**Xylol quotations, both coaltar and petroleum, may be found under Xylene.**

## Y

Yara yara oil, cns. ..... lb 2.15 • 3.05
Yeast, brewers, debittered, USP, Saccharomyces dlvd lb. .27 • —
Yeast, brewers, dry, USP, 50 Int'l B units per gram, 100-lb. dms. lb. .47 • —
USP 90 Int'l B units per gram, 100-lb. dms lb. .52 • —
Yeast, brewers, USP, 200 Int'l B units per gram, 100-lb. dms lb. .56 • —
USP, 300 Int'l B units per gram, 100-lb. dms lb. .60 • —
Torula USP dlvd ..... lb .18 • —

**YELLOW PIGMENTS**
**Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow.**

Yerba santa leaves, bls. ..... lb. .40 • .45
Ylang-ylang oil, Bourbon bots lb. 7.00 • 22.00
extra, bots. ..... lb 28.00 • 33.00
Yohimbine hydrochloride, bots., tins. oz. 3.75 • 4.25

## Z

Zein, bgs., 36,000-lb. lots or more, bgs., 500-lb. lots or more, dlvd. lb. .343 • —
bgs., smaller lots, dlvd. ..... lb. .373 • —
Zinc acetate, NF, VIII, dms. ... lb. .53 • —
Tech., dms., l.t.l., works ..... lb. .29¾ • —
Zinc borate, bgs., 1,000 lbs or more, works lb. .23 • —
bgs., less than 1,000 lbs. same basis lb. .25 • —
Zinc chloride, NF, gran., dms lb. .42 • —
NF, precip., powd., dms .... lb. .26 • —
Tech. soln. 50%, dms. c.l., works, 100 lbs 5.80 • —
dms., l.c.l., works .. 100 lbs. 6.40 • —
tanks, works ..... 100 lbs. 5.15 • —
fused, dms., c.l., works 100 lbs. 10.70 • —
dms. l.c.l. works .. 100 lbs. 11.20 • —
gran., fib, dms., c.l., works, 100 lbs. 11.45 • —
fib dms. l.c.l. works 100 lbs. 11.95 • —
Zinc chromate, bbls., dlvd. ..... lb. .29 • —
Basic, bbls. dlvd. ..... lb. .34 • —
Zinc cyanide, dms., 1,000-lb. lots or more, works lb. .55 • —
dms., smaller lots, works .... lb. .57 • —
Zinc dust, comt., bbls., c.l., works, lb. .17 • —
Pigment, bbls., c.l., works .... lb. .16½ • —
bbls., l.c.l., works ..... lb. .18¼ • —
Zinc fluoride, bbls., works .... lb. .49 • 50
Zinc hydrosulfite, dms., c.l., frt. alld lb. .21½ • —
dms. l.c.l., frt. alld. ..... lb. .23½ • —
Zinc metal, prime western, slabs, E. St. Louis lb. .12½ • —
Prime western, slabs, New York, lb. .13 • —
Zinc naphthenate, liq. 8% Zn., dms., frt. alld lb. .27 • —
10% Zn., dms., frt. alld .. lb. .33 • —
Zinc nitrate, tech., cryst., bbls., works lb. .20 • —
Zinc oxide pigment, American process, lead-free, bgs. c.l., frt. alld lb. .14½ • —
bgs. l.c.l. 10 tons or more, same basis lb. .15 • —
bgs., l.c.l., smaller lots, same basis lb. .15½ • —
leaded, 35% bgs. c.l., mills, frt. alld lb. .15⅝ • —
bgs. l.c.l. 10 tons or more, same basis lb. .15⅞ • —
leaded, 50% bgs. c.l., same basis lb. .15¾ • —
bgs., l.c.l. 10 tons or more, same basis lb. .16¼ • —
bgs. l.c.l. smaller lots, same basis lb. .16⅝ • —
Zinc oxide pigment, French process, green seal, bgs., c.l., mills, frt. alld lb. .16¼ • —
bgs., l.c.l. 10 tons or more, same basis lb. .16¾ • —
bgs. l.c.l. smaller lots, same basis lb. .17¼ • —
red seal, bgs., c.l., same basis, lb. .15¾ • —
bgs., l.c.l. 10 tons or more, same basis lb. .16¼ • —
red seal, bgs., l.c.l., smaller lots, same basis lb. .16¾ • —
white seal, bgs., c.l., same basis lb. .16¾ • —
bgs., l.c.l. 10 tons or more, same basis lb. .17¼ • —
bgs., l.c.l., smaller lots, same basis lb. .17¾ • —
Zinc oxide, USP, dms. c.l. frt. alld. lb. .18¼ • —
dms., l.c.l., 10 tons or more, same basis lb. .18¾ • —
dms., l.c.l., smaller lots, same basis lb. .19¼ • —
Zinc phenolsulfonate, NF, gran., dms lb. .45 • 48
NF, powd., dms ..... lb. .48 • .49
Zinc resinate, precip., 7.2-7.6% Zn., dms., frt. alld lb. .40½ • —
Zinc silicofluoride, dms., works lb. .12½ • .14
Zinc stearate, tech., USP, ctns., c.l., lb. .41 • —
ctns., l.c.l. ..... lb. .42 • .48
Zinc sulfate, powd., monohydrate, 36% Zn., bgs., c.l., dlvd. E 100 lbs. 8.75 • —
bgs., l.c.l., dlvd. E 100 lbs. 9.75 • —
USP, gran., dms. ..... lb. .26 • —
Zinc sulfate in bbls. 40c. higher.
Zinc sulfide pure, bgs., c.l., dlvd lb. .2530 • —
Zinc undecylenate, dms. ..... lb. 2.00 • —
Zinc yellow (see Zinc chromate).
Zinc-ammonium chloride, ogs., c.l., works 100 lbs. 10.25 • —
bbls, c.l., works .....100 lbs. 10.85 • —
bbls., l.c.l., works .....100 lbs. 11.35 • —
Zinc-formaldenyde sulfoxylate, basic, 300-lb. dms., frt. alld lb. .26 • —
Normal, 250-lb. dms., frt. alld lb. .52 • —
Zircon (G), gran., bgs., c.l., works, lb. .03½ • —
bgs., 5 tons to c.l., works lb. .03⅝ • —
bgs., 1 ton to 9,999-lb lots, works, lb. .04 • —
bgs., smaller lots, works .. lb. .06½ • —
Milled, bgs., c.l., works ..... lb. .04⅛ • —
bgs., 5 tons to c.l., works .. lb. .04⅜ • —
bgs., 1 ton to 9,999-lb. lots, works lb. .04⅝ • —
bgs., 500-1,999-lb lots, works lb. .07½ • —
Zircon (G) in barrels 1c. higher.
Zirconium acetate, soln., 13% $ZrO_2$, dms., c.l., 30,000 lbs. min., works lb. .23 • —
Zirconium hydride, powd., electronic grade dms., works lb 14.00 • 15.00
Zirconium oxide, CP, white, grd., bbls. or bgs., works lb. 1.50 • —
Electric-fused, lump, bgs., 500 to 1,999-lb. lots, works lb. .49½ • —
bgs., smaller lots, works lb. .51 • —
milled, bgs., c.l., works ..... lb. .62 • —
bgs., 5-ton lots, works ... lb. .62½ • —
bgs., 1-ton to 9,999-lb. lots, works lb. .63¼ • —
bgs., 500 to 1,999-lb. lots., works lb. .64 • —
bgs., smaller lots, works lb. .66 • —
Glass polishing grade, 94-97% $ZrO_2$, bgs., works .... lb. .55 • .65
Opacifier grade, 85-90% $ZrO_2$, bgs., lb. .27 • .50
Stabilized oxide, 91% $ZrO_2$, milled, bgs lb. .62 • .83
Zirconium oxychloride, cryst., ctns., 5-ton lots, works ..... lb. .37½ • —

# *Drug Probers Have New Tune to Play*

—*Continued from page 3*

ures showing that the twenty-two largest pharmaceutical houses earmarked 6.4 percent of their income for research.

Dr. Smith presented statistics indicating that the industry spends 9.5 percent on research. This compares with 3.2 percent for all other industries. In 1959 pharmaceutical industry research expenditures amounted to nearly $200 million.

Emphasizing the "staggering investment" which the drug industry puts into research, the PMA president said that "the chance that any given research involving a new potential medicine will be successful stands at 2,865 to one against the manufacturer."

US drug industry laboratories, he pointed out, have played a vital role in many research breakthroughs. These are some of the examples he cited: The discovery and development of the sulfa drugs, the synthesis and development of high-potency corticosteroids, the mass production of penicillin and the discovery and development of the other broad-spectrum antibiotics.

### Committee Cites Foreign Discoveries

The subcommittee scoffed at these claims, and promptly produced a list of its own itemizing thirty-three major drugs that originated in foreign countries. Here are a few samples:

Penicillin, discovered in England; tolbutamide, Germany; testosterone, Switzerland; sulfanilamide, Germany, and chlorpromazine, France.

Dr. Smith, in an obvious reference to previous subcommittee charges of exorbitant drug profits, stoutly defended the industry's pricing practices.

He told the senate investigators that Americans "would be paying a billion dollars a year more for drugs if the price of medicine in the past few years had gone up only as much as the total cost of living."

Wholesale drug prices have risen only 3 percent in the last decade, he reported, compared with a 22 percent increase in the prices of other industrial products.

Supporting Dr. Smith on drug industry pricing was Frederick L. Thomsen, consulting economist to the PMA and a former professor of marketing at the University of Missouri.

### Thomson Defends Pricing Practices

Mr. Thomsen asserted that previous testimony about high mark-ups is misleading and gives an unfair impression of industry profits.

"Manufacturers' average profits per retail dollar, he contended in an analysis filed with the subcommittee, "is roughly 6 percent."

If all the profits of the drug makers were wiped out, he declared, consumers "would hardly notice the difference in prices."

Sen. Kefauver was of another mind. A 50 percent reduction in profits, he maintained, would cut retail drug prices by about $500 million a year on the basis of the industry's present volume.

Dr. Smith had one argument for which the subcommittee had no answer. Death, said the PMA president, costs around $900 for funeral expenses alone.

Recently, he said, he was laid up with an illness that was threatening to turn into a nasty—and, perhaps, lethal—case of pneumonia. An antibiotic prescription pulled him through. Cost: $15.25.

This round of hearings was featured by its sputtering pace. A roadblock was thrown up by Sen. Everett M. Dirksen of Illinois, who objected to the subcommittee's sitting while the senate was in session.

### Committee Pressed for Time

As the senate was engaged in long, drawn-out floor debate on the civil rights, the drug probers were able to hear at only infrequent intervals during the week—less than an hour each morning and two three-and-a-half hour night sessions.

Sen. Kefauver indicated that the subcommittee was not finished with Dr. Smith and that it will call him back for questioning later on.

Though pressed for time, the subcommittee managed to get on two witnesses of its own: Dr. Haskell J. Weinstein and Dr. Martin A. Seidell. Both are former medical directors of the J. B. Roerig Division of Chas. Pfizer & Co., Brooklyn, N. Y.

Dr. Weinstein, who is now director of the Chest Hospital at the City of Hope Medical Center, Duarte, Calif., charged that there is a great deal of "questionable research" being carried on by the pharmaceutical industry.

What's more, he continued, the drug makers are not paying enough attention to the problems of efficacy and safety.

"A number of drugs have been put on the market with efficacy claims based on extremely meager and unobjective observations by people not truly qualified to make such observation," he said.

Dr. Weinstein further alleged that there is a considerable amount of misleading advertising and promotional literature being disseminated by the industry. He also singled out for criticism ethics to induce the physician to prescribe by brand name.

### "Brain-Washing" the Doctors

Doctors are being "brain-washed" and "seduced with gimmicks" in an attempt to make them "loyal to a particular company or a particular drug, with relatively little attention being paid to the specific merits of the drug in question," he maintained.

Dr. Seidell, now associate medical director of Riker Laboratories in Los Angeles, testified that he quit his medical directorship at Roerig in protest against sales policies that, in his opinion, violated the ethics of the medical profession.

A Pfizer statement, issued in New York, said:

"It is an unjust reflection on the medical profession to say, as Dr. Weinstein does, that doctors are being brainwashed or seduced.

"This charge we emphatically deny both for ourselves and for the industry of which we are a part.

"We deny categorically the criticism of our advertising and marketing practices.

"As for Dr. Seidell's alleged reason for leaving Pfizer, it is worth noting that he resigned only after an assistant received a promotion to which Dr. Seidell thought he was entitled himself.

# *Coaltar Color Delisting May Not Be Legal*

—*Continued from page 3*

if not all, coaltar colors are subject to future delisting, thereby subjecting already certified lots of such colors to revocation, if the proposed regulations are allowed to be come effective.

Abbott, he says, would be "seriously handicapped in its production and marketing in that it would be compelled to purchase and use colors under the constant threat of revocation of their certificates." He adds that the company would have to go into "expensive crash programs in an attempt to develop satisfactory substitutes."

The petition specifically refers to a six months' supply of a yellow color which would become worthless if orders on decertification, scheduled for April 6, 1960, go through as announced. The Abbott colors, he notes, were selected after extensive testing because of "their superior qualities or special compatibility wtih patented coating materials."

Meanwhile, at the lipstick color hearings in Washington, Dr. Otto Carl Jacobi testified on the results of some experiments he had conducted on so-called "kiss-proof" lipsticks.

Brought over from Germany as an expert witness by the Toilet Goods Association, Dr. Jacobi, who is research director of Kolmar Laboratories, Wiesbaden, indicated that the colors used in these lipsticks do not penetrate into the living tissue of the lips.

It was his opinion that this probably also is true for other lipstick colors.

All of Dr. Jacobi's testimony was stricken from the record by William J. Risteau, but the Food & Drug Administration hearing examiner permitted it to be appended as "an offer of truth."

Dr. Bernard Oser of Food & Drug Research Laboratories, New York, testified that the FDA tests on the colors were only sketchy at best—suitable only for a preliminary investigation.

Dr. Oser, a chemical consultant for Revlon, Inc.—one of the world's largest lipstick makers—contended that government experiments were not properly planned to show whether the colors were harmful or not.

The bulk of last week's sessions, however, was given over to an intensive interrogation of Dr. O. Garth Fitzhugh, chief of FDA's toxicity branch, particularly on the testing done by the agency on the fourteen banned lipstick colors.

It is the cosmetic industry's contention that FDA based its decision on faulty tests and that coaltar colors which kill rats need not cause any harm to humans. In fact, FDA has already admitted that there is no evidence that the prohibited colors have ever killed a single human being.

FDA is holding up its ban pending the outcome of these hearings, which are expected to continue well into this week, at least.

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# Heavy Chemicals

Alkali prices broke wide open and upward, but the situation is still unsettled. A leading producer boosted bulk prices of liquid chlorine $4 a ton on spot, April 1 on contract. Late Friday, a competitor matched the rise to the extent of $2. Three major firms are still to be heard from. So far only one firm has posted advances of $2.50 a ton for soda ash, $2 for high-test, flake calcium chloride and $1 for regular flake chloride.

The price increases were the first since 1956 on chlorine and soda ash and the first since 1957 on calcium chloride.

Off three percent from the post strike boom level, current steel output begins to reflect the more cautious attitude prevailing at the consumer end of the economy. Automotive output and sales, red-hot a month ago, cooling off gradually, have settled in a comfortable slot. Detroit's pressure on Pittsburgh is now deemed merely normal for this time of the year. And thereby, sales of acid to the steel people have simmered to a level only a little better than the normally good pre-Spring season pace, sources close to the trade report.

Equally eased but still satisfactory is the pace of the aluminum industry. The slight downturn, observers note, has taken some of the preternatural steam out of the alkali market, where sales reports now echo the good-but-not-spectacular theme of acids and metals.

Wedged snugly between lagging business volume and tight supply are mercury prices, quoted at a six-week old range, but with better business volume and higher prices anticipated for the latter part of the season.

Before tapering off to a steady pace, to be followed by a rolling re-adjustment early next year, as predicted, will the nation's economy indulge in one more big production splurge?

That's the question, trade sources agree. Equally unanimous are they about when such a rally would take place. Early spring, say these sources close to the trade and within, should tell the story. If the indicators don't soar by then, chances are business will just wobble sideways for the year's balance. High-keyed promotion is needed at the consumer level, the advertising people add.

Just for the record, one more mention of last fortnight's HF price chopping is in order. Only bulk prices were affected, except for one minor adjustment. Bulk material was reduced $2.10 a hundredweight, and consumers were given a slight break on prices for 30-lb. drums. Anhydrous acid was marked down 3 cents a pound in bulk but was unchanged otherwise.

Mouths agape at news of the cut, but with shears ready to do likewise, the trade *in toto*, last fortnight, had matched their quick-moving competitor's opening gambit by sunset.

The American Paper and Pulp Association reported production for the week ended February 20, at 96.5 percent of theoretical capacity as compared with the revised figure of 97.6 percent for the previous week and 90.9 percent for the corresponding week of last year.

## Acids

**Boric**—Prices have been steady since the advance of July 1, 1959; no change is on the books for start of the second quarter. Business volume is just about meeting expectations, good enough, but not spectacular, trade sources say.

**Hydrochloric**—Holding up well is demand in a broad range of chlorinated solvent outlets. And intake by steel picklers gives no cause for complaint. Though tapered off from the boom level of the post-strike period, Pittsburgh's requirements are keeping the acid in good form.

**Hydrofluoric**—Mouths agape at news of a competitor's price cut last fortnight, the trade *in toto* had mached the move before sunset. A competitive thrust adroitly parried, said one observer. What was gained? Consumers are counting the gain: $2.10 a hundredweight for bulk material, and a slight break on prices for 30-lb. drums.

**Nitric**—Nitrate makers, with the fertilizer people in the vanguard, have taken the market by storm now that the Spring season has thrust itself into second gear.

**Sulfuric**—Output of the acid soared to 17,515,114 tons last year, according to OPD's compilation of monthly figures issued by the Census Bureau. Top month was April with 1,595,879 tons.

Steel output last week totaled 2,671,000 net tons, or 93.7 percent, according to an advance estimate by the American Iron & Steel Institute, down a mite from an actual total of 2,674,000 net tons, or 93.8 percent of capacity, for the previous week.

A month ago, height of the post-strike boom, output totaled 2,717,000 tons, the Institute recalls. It reached 2,506,000 tons a year ago, it is added.

### Price Trends

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Tin, salts, ½c.-3/5c. per lb.

**Comparative Price Indexes**

(100—1949 average)

| Last week | Prev. week | Last month | Feb. 27, 1959 |
|---|---|---|---|
| 106.79 | 106.79 | 108.53 | 104.28 |

*For Current Prices See Page 11*

## Bases and Salts

**Calcium Chloride**—Prices have been advanced by one maker $2 a ton for high-test, flake material and $1 for regular flake, effective immediately on spot, April 1 on contract.

**Caustic Soda**—A rayon grade of liquid caustic soda has been made available at prices five percent below standard material, trade sources report. Accounting for about 15 percent of the alkali's sales volume, rayon output is currently at a high level, but the tire cord outlet is seriously menaced by nylon.

Engaged in a fierce struggle for survival are these two synthetics, trade sources tell OPD, and the outcome will make no small difference to the caustic soda picture.

**Chlorine**—A major producer boosted bulk prices of liquid chlorine $4 per ton on spot, April 1 on contract. So far only one competitor has had a chance to respond, but only to the extent of $2. Three other major firms are still studying the situation.

**Hydrogen Fluoride**—Anhydrous grade hydrogen fluoride (hydrofluoric acid) was reduced 3c. a pound last fortnight in bulk to a level of 18c. a pound. Containers were not affected. The slash was a competitive move that was quickly matched by the rest of the trade.

**Soda Ash**—Flat glass shipments by manufacturers hit $68.7 million in the fourth quarter of 1959, up from $68.4 in the previous quarter, reports the Census Bureau. Shipment values for sheet glass accounted for 50.8 percent of the total.

Summarizing the year, Census reports a total valuation of $272 million, up a whopping 44.2 percent over 1958's $189 million. Sheet glass made up 49.3 percent of the '59 total, 48.9 percent of the year-earlier figure.

Prices have been advanced by one maker $2.50 a ton, immediate on spot, April 1 on contract. Other makers haven't had a chance to respond yet.

## Nonferrous Metals

**Copper**—Production from primary materials soared in December with settlement of some of the strikes plaguing industry. Smelter production was up 59 percent, refinery production up 51 percent, the Mines Bureau reports.

Imports of unmanufactured copper totaled 80,500 tons, against 68,500 the previous month, and the highest since June of 1954. Receipts of unrefined materials rose 67 percent, the Bureau notes, while those of refined copper fell 8 percent. Exports during the month were nearly double the rate reported for November.

Refined stocks at primary refineries added up to 18,000 tons on December 31, incredibly enough, the lowest since the year 1900.

Reporting on copper-base scrap for the same month, another Mines Bureau release tabs consumption at 97,000 tons, up 18 percent from November.

Treatment at brass mills was up 10 percent, at secondary smelters up 7 per-

## Heavy Chemicals

cent, at primary producers up 50 percent, Mines goes on to note.

Output of brass mill products gained 10 percent in December while ingot production by smelters was virtually unchanged. Refined copper fell 13 percent, the agency notes.

Prices paid in New York for No. 1 and No. 2 scrap were 25½c. and 22½c. a pound, respectively, on December 1, each rising ½c. during the course of the month to close at 26c. and 23c.

In 1959, according to the agency's summary, scrap consumption by secondary smelters, brass mills and primary producers totaled 1,142,100 tons as against 973,100 the previous year.

**Magnesium**—Net shipments of magnesium mill products during November, reports the Census Bureau, totaled 1,320,000 pounds, down a steep 41 percent frm October shipments of 2,220,000 pounds, but down only moderately from last November's 1,660,000 pounds. The compilation was based on reports from ten companies, Census notes.

**Mercury**—Wedged snugly between lagging business volume and tight supply are prices, quoted at a six-week old range of $211 to $215 a flask, large lots, prompt shipment. Anticipated for the latter part of the season in an upturn of business volume with a corresponding price hike.

**Platinum**—Prices were boosted a month ago on heels of an abrupt tightening of world supplies. That $5 hike leaves the range at $82 to $85 an ounce, as to quantity.

**Silver**—Price has been unchanged for aye at 91⅜c. a troy ounce, spot.

**Tin**—Fair demand kept the price steady at $1.01 a pound, spot.

## Pesticide Regulations

—Continued from page 7

necessary for continuation of the American standard of comfortable living that now exists."

The industry, he stressed, spends millions of dollars in research every year to develop new pesticides for pests that have become immune to those already in existence.

"It is estimated that over $30 million will be spent this year in the search for new and better agricultural chemical products," he stated.

The current trend to larger farms and ranches is aiding the pesticide maker by increasing financial resources, by putting greater emphasis on the use of pesticides and by reducing the complexity of distribution, according to Mr. Vernon.

Damage done to crops annually is still "staggering," he said. The NACA chief estimated that between $13 and $15 billion is lost yearly to weeds, insects, plant and animal diseases and other marauders. Rats and rodents alone take an annual toll of $1 to $2 billion, he noted.


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## Copper Sulfate Is Sought By Government of Greece

The Agricultural Bank of Greece is asking bids on 2,000 metric tons of crystalline copper sulfate, worth about $400,000.

Offers must reach the Permanent Supplies Committee, Agricultural Bank of Greece, 23 Venizelos Street, Athens, by March 15.

Copies of specifications (Bid No. 1508/1) are available on loan from the Bureau of Foreign Commerce's trade development division, Department of Commerce, Washington 25, D. C.

## Nel-Kan Corp. Is Appointed Continental Can Distributor

Nel-Kan Corporation, Jersey City, N. J., has been appoined a distributor and factory representative by Continental Can Company and will handle its steel containers and general line cans in the metropolitan New York and New Jersey area.

The distributing firm is a new division of Dupont Cooperage, Inc., Jersey City, sellers and reconditioners of used steel drums.

## Hart Products Corp. Starts Output Of Water-Phase Pigment Emulsions

Hart Products Corporation, New York, has started production on "Hartochrome" colors, a series of water-phase pigment emulsions for use in the textile printing industry.

The announcement was made as the company officially opened the celebration of its fortieth anniversary with a technical and sales meeting held at its Jersey City, N.J., laboratories under the supervision of Milton Greene, sales manager.

## Sodium Caseinate Output Started

American Casein Company, Camden, N.J., has started production of refined edible grade sodium caseinate, providing a very high content pure animal protein. Applications of this new product include meat fortifying binders, diatetic supplements, whipping agents, ice cream, candies, toppings and bakery mixes.

## Jobs & People

Allied Chemical Corporation, New York—**H. Clay Warmouth** has been appointed western sales representative for the plastics and coal chemicals division.

Dow Chemical Company, Midland, Mich.—**Ted W. Palmer** has been named product manager for "Separan" flocculants and "Versene" chelating agents.

General Mills, Minneapolis, Minn. —**Malcolm C. Graham** has been appointed a New York sales representative for the chemical division.

Hooker Chemical Corporation, Niagara Falls, N. Y.—**R. W. Hooker,** senior vice-president of the company, has been elected a senior board member of the National Industrial Conference Board for a term of three years.

Miles Laboratories, Inc., Elkhart, Ind.—**Irving B. Wershaw** has been elected a vice-president. He is president and chief executive officer of Dome Chemicals, Inc., a Miles subsidiary.

Mobay Chemical Company, Pittsburgh, Pa.—**Ronald P. Marsh** has joined the company as technical service representative for "Merlon" polycarbonate resins.

Organon, Inc., Orange, N. J.—**Joseph J. Ruvane, jr.,** has been appointed vice-president of marketing.

Warner-Lambert Pharmaceutical Company, Morris Plains, N. J.—**Paul Elliott-Smith** has been named to the newly-created position of director of new products in the company's products division.


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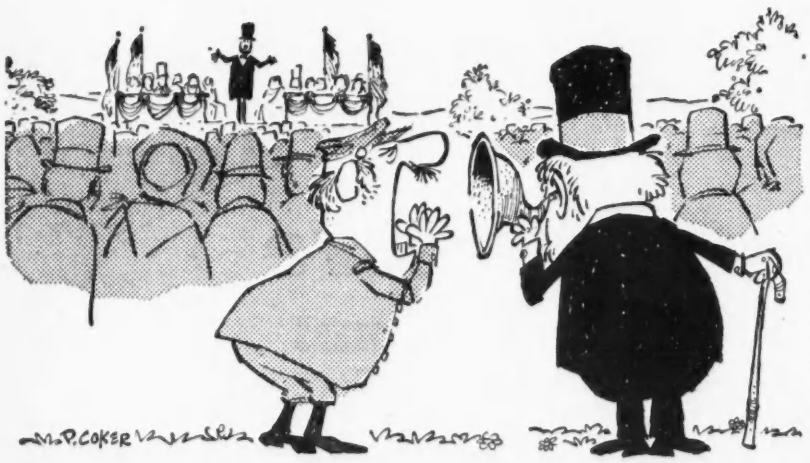


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## Obituaries

### George E. Campbell

George E. Campbell, manager of the purchasing department of American Agricultural Chemical Company, died February 21 in Flushing, N. Y. He was sixty-four years old.

Starting with AAC in 1910, Mr. Campbell advanced to assistant manager of purchasing in 1923 and manager in 1940.

### William C. Dunlap

William C. Dunlap, manager of purchasing for New Jersey Zinc Company, died February 18 in New York. He was sixty-six years old.

Mr. Dunlap joined the company in 1915 as an engineer. He was appointed purchasing agent in 1945 and manager of the department in 1955.

### Kenneth A. Spencer

Kenneth A. Spencer, board chairman and founder of Spencer Chemical Company, Kansas City, Mo., died February 19 in Miami Beach, Fla. He was fifty-eight years old.

Mr. Spencer started with Pittsburgh & Midway Coal Mining Company in 1925 as an engineer and advanced to the position of president in 1943. At the request of the War Department in 1941, Mr. Spencer established the government-owned Military Chemical Works, Inc., and the Jayhawk Ordnance Works at Baxter Springs, Kan.

At the end of the war, he converted Jayhawk to production of nitrate fertilizer for export by Commodity Credit Corporation. A year later he acquired the plant and the company from the government and established Spencer Chemical Company. By 1957 the new firm's sales had approached the $50 million mark.

**George E. Bridgett,** retired from Standard Oil Company (N. J.) since 1927 and that company's oldest pension employee, died February 5 in San Francisco, Calif. He was ninety-seven years old.

**Frederick L. Hensler,** assistant treasurer of Prior Chemical Corporation since 1927 and an officer of its affiliate, Payson Corporation, died February 22 in Paramus, N. J.

**Charles Morgan,** chief chemist of the New York Racing Commission and internationally known authority on narcotics, died February 20 in West Hempstead, N. Y. He was fifty-nine years old.

**Louis Moore,** former editor of the *American Druggist*, died February 23 in New York. He was seventy-five years old.

**V. Dewey Windle,** president of Eileen Courtney Cosmetics Corporation, New York, died February 19 in Chicago. He was sixty-two years old.


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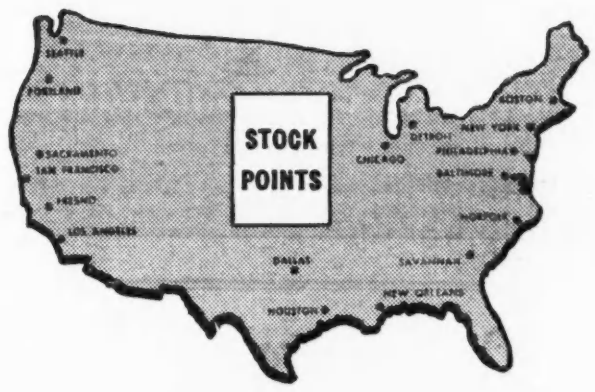


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## USDA Has New Scheme For Surplus Corn: Solvents

Department of Agriculture worked out a limited program for using surplus corn to produce industrial alcohol and related solvents.

This is an experimental program. Besides moving additional surplus stocks, the new program is aimed at obtaining actual conversion cost data on processes necessary to produce the industrial solvents, and at exploring the economic impact on the markets affected.

Under the scheme, limited quantities of corn from the surplus inventory of the Commodity Credit Corporation will in the near future be offered for sale on the basis of competitive bids.

Bids will be accepted from those prospective buyers who have facilities for converting the corn into ethanol and/or acetone-butanol-ethanol.

Corn from storage points selected by CCC will be made available on a delivered basis, f.o.b. carrier at the purchaser's point.

The legal minimum price on sales of CCC corn for unrestricted use (105 percent of the current support level plus reasonable carrying charges) will not apply to sales under the special program.

Producers who participate in the program will be required to make available to USDA cost data on processing the corn and handling the entire operation.

## *HEW Secretary*

—*Continued from page 4*

"provide an important new mechanism for exercising federal leadership in this field."

He plans to apply this authority to air pollution problems of an interstate character and "those which are of broad significance because they occur in many areas." He cites a few examples of the latter problems:

- Emission of pollutants from automobile operations.
- Products distributed nationally on a relatively uniform basis which are of concern in relation to air pollution. Additives for gasoline, for instance.
- Sulfur dioxide pollution, deriving from combustion of common fuels.

Mr. Flemming emphasizes that neither the investigations nor public hearings will be binding on any of the participants.

"I do feel, however, that such investigations and hearings, if held, would focus public attention on and develop support for the most carefully considered recommendations for solution to the problems which occasioned the hearings," he says.

As for the grants-in-aid amendment, he believes the allotment procedure "is unnecessary and administratively cumbersome," since these funds are dispensed on a project basis under the Surgeon General's air pollution authority.

## *Drug Scientists*

—*Continued from page 7*

to be commercial failures," Dr. Scull declared.

Citing several case histories of SK&F research, Dr. Scull noted that "the paths to medical breakthroughs are sometimes long, devious and unpredictable."

And these paths must be trod by a whole army of pharmaceutical researchers, he noted, not just the first chemist who comes across a new drug. Before the product is ready for marketing, contributions have been exacted from biochemists, organic chemists, microbiologists, pharmacists, physicians, biostatisticians and investigators of the drug.

Rejecting the approach of the "mechanist," he added: "More people on the job, more scientists working together and the expenditure of more money doesn't necessarily mean that progress will be stepped up immeasureably."

Critics should not overlook the pharmaceutical industry's key contribution toward the discovery and development of vitamins $B_1$, $B_6$ and $B_{12}$; Sulfa drugs, broad spectrum antibiotics; anti-diabetic sulfonamides, the diuretics, anti-hypertensives and anti-phsychotics," he said.

"Literally millions of Americans are now alive and well who, were it not for the achievements of pharmaceutical research would be hopelessly invalided, crippled or dead. If this is the result of "me-too research," let's have a lot more of it," Dr. Scull concluded.

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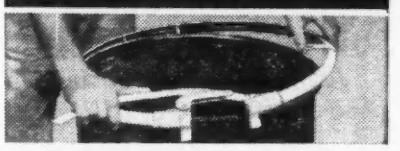
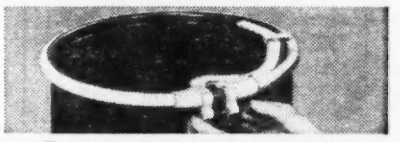
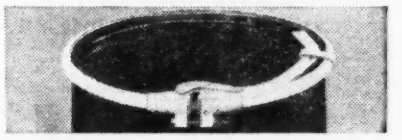


1. Apply ring to drum.



2. Clamp lever in place, insert bolt and apply nut.



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# Petroleum Derivatives

**The only petroleum derivative with a serious supply problem still is benzene. Sources report benzene is extremely scarce, with material moving on spot at 6 cents a gallon more than the contract price of 34 cents a gallon. The rest of the aromatics are problems of a different sort. In the cases of xylene and toluene, supply positions are said to be on the long side. The market conditions for toluene remains unchanged, while xylene's price schedule reflects the combined pressure of tough competition and from the building up of producers stocks. The focus of this pressure has been in Detroit where the price of xylene dropped 1½ cents a gallon, as reported in this space last week.**

**In the aliphatics, the general market tone remain routine. Mineral spirits, both regular and odorless, are fairly well situated in regard to price patterns and consumer demand. The market for hexane is reported to be somewhat slow despite the stepped-up activity in the auto industry.**

**In an article released by the Associated Press, the output of crude petroleum in Russia was 2.3 million barrels a day during 1958, compared to the 6.6 million a day produced in the United States. The Soviets plan to raise output to 2.9 million barrels a day in 1960, to 4.6 to 4.8 million in 1965 and from 7 to 8 million barrels a day in 1972.**

**This latter figure would exceed present US production. However, it is noted that the US companies now could increase domestic output by 3 million barrels a day warranted. In addition, the article said the US is expected to require a daily production of 14 million barrels in 1975, or twice the rate the Soviets hope to achieve in 1972, indicating the USSR faces a formidable task in overtaking the US.**

**There is reason for concern because the USSR still has large deposits of petroleum at relatively shallow levels while US oil is becoming more difficult and costly to find. The rate of growth of Soviet oil production is seen in the fact that in 1946 the US outproduced the Russians 11 to 1, while the ratio now has been narrowed down to about 3 to 1.**

**From another source, the Chase Manhattan Bank, in its monthly bulletin, urged drastic reductions in refinery operations. Cuts in refinery runs have already been announced by several leading oil companies. One refiner said its runs had been reduced to 63,000 barrels a day, or 14,000 a day below January operations, as of last week.**

### Price Trends

**Advanced**
None

**Reduced**
None

**Comparative Price Indexes**
(100=1949 average)

| Last week | Prev. week | Last month | Feb. 27, 1959 |
|---|---|---|---|
| 104.34 | 104.34 | 103.64 | 104.42 |

*For Current Prices See Page 11*

## Aromatic Solvents

**Benzene**—There is little change in market conditions this week. The supply position of this aromatic solvent remains tight and is likely to remain so for several months. Producers feel that some loosening in conditions might come about in the third quarter of this year. Spot material continues to bring down premium prices, often going for 40c. a gallon in some areas. The contract price of benzene is 34c. a gallon, unchanged.

**Toluene**—Supplies are reported by producers as ample in all areas, with strong tendencies toward the long side. Increases in demand from the stepped-up operations in the automobile industry has not subtracted appreciably from the surplus of material plaguing producers. As a result much of the excess is let run into gasoline. Price schedules in effect over recent weeks hold unchanged.

**Xylene**—With the exception of Detroit, where stiff competition for the auto makers' business prevails, the general market tone is routine. Supplies are more than ample in all areas. Prices tend to be firm with Detroit area softening somewhat under the pressure excerted by the automobile industry. No change in these conditions is anticipated by producers over next quarter.

## Alphatic Solvents

**Hexane**—With automobile production rolling along at a good clip, hexane demand is reported to be well sustained. Other diluent uses, such as metal finishing operations, have not regained their prestrike momentum, since inventories are still far from depleted. The vegetable oil extraction operations which normally provide a big outlet for much of the hexane demand, is faring poorly as a result of a decline in those operations. Prices hold unchanged.

**Mineral Spirits**—Demand from the paint trade is well sustained. Both the odorless and regular mineral spirits are holding up well against a generally routine market. Supplies are abundant with no change in prices reported.

## LPG's

**Butane-Propane Mix**—For the period January 16-31, 1960, output of this LP gas was set at 25,292,000 gallons by the API. A year ago, production hit 32,357,000 gallons, or 7,065,000 gallons above the output for January of this year. Refineries produced 3,702,000 gallons for the last two weeks in January, 1960, while a year ago the figure was placed at 2,648,000 gallons. This represents an increase of 1,054,000 gallons of butane-propane mix from refineries for the reported period.

**Ethane-Ethylene**—The American Petroleum Institute reports that for the last two weeks of January, 1960, the output of this LP gas was 20,856,000 gallons. Exactly a year ago production stood at 14,699,000 gallons. This represents an increase of 6,157,000 gallons. During the same period, production from refineries totaled 16,416,000 gallons, while the figure for the last two weeks of January, 1958, is 9,419,000 gallons.

## Waxes

**Microcrystalline Wax**—There is no change from the previous weeks in market conditions affecting the light colored microcrystallines. Food packaging continues to account for a large share of production. Prices are unchanged.

**Paraffin**—Crude prices held at the same levels as in the last few months. The price of crude is 6.55c. per pound, while fully refined paraffins in various melting ranges are comparably quoted in tankcars at the refinery at price levels of 7.65c. per pound. Domestic demand is steady with little change.

## Miscellaneous

According to the Bureau of Mines, current reports of the industry for the week ended February 12, 1960, indicate a decrease in crude-oil production and a decrease in crude runs. According to the API, the daily average output of crude (including lease condensate) was 7,256,000 barrels, a decrease of 37,000 barrels from the preceding week. Daily average crude runs to stills of 8,077,000 barrels were 122,000 barrels below the preceding week, and 123,000 barrels above the week ended February 13, 1959. **Runs of foreign crude amounted to 955,000 barrels daily, compared with 903,000 barrels in the preceding week. For the four-week period ending February 12, crude oil production averaged 7,219,000 barrels daily, and crude runs to stills averaged 8,163,000 barrels daily with runs of foreign crude averaging 927,000 barrels daily.**

### Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended February 13, totaled 248,916,000 barrels according to data reported by the Bureau of Mines. Compared with the total of 249,351,000 barrels the preceding week, this represents a decrease of 435,000 barrels comprising an increase of 132,000 barrels in stocks of domestic crude and a decrease of 567,000 barrels in stock of foreign crude.


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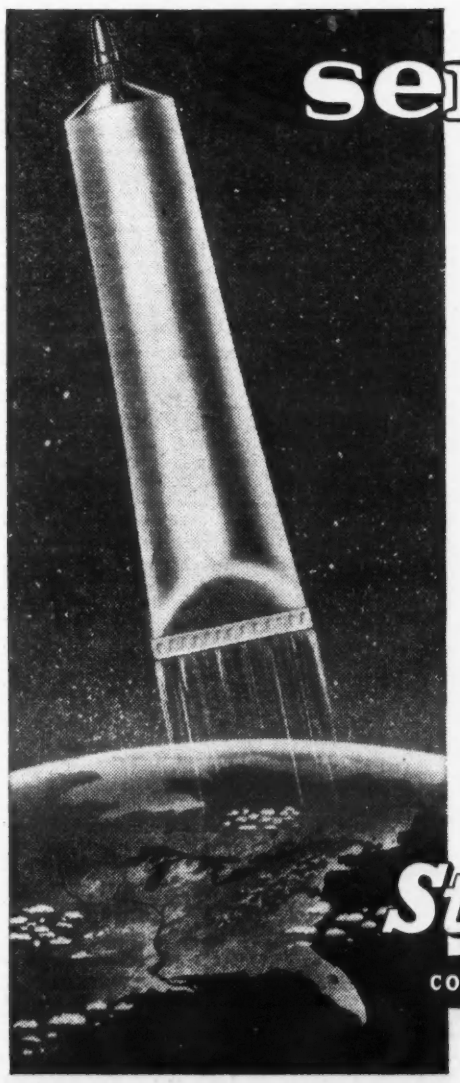

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# *Benzene Hexachloride, Warrior Against the Boll Weevil, Fights a Legion of Foes*

## OPD Special Report on Benzene Hexachloride

—*Continued from page 5*

former markets. Toxaphene use in agricultural markets made its first big splash in 1951-53, when an estimated 112 million pounds were used. Now, annual demand is said to be around the 75-80 million-pound mark.

Methyl parathion, considered by many to be the most spectacular cotton poison in terms of dramatic knockdown and kill of insects, hardly made a dent four years ago. But 1957 sales totaled 1,925,000 pounds and 1958 sales rose to more than 5 million pounds, technical basis. Official figures on '59 aren't available yet, but further sharp gains are expected.

**Hope to Restore Prestige**

Through promotional efforts, belated though they may be, the BHC industry hopes to restore its prestige—and at least part of its lost volume during the next year.

Two new opponents loom on the horizon: Union Carbide Corporation's carbamate "Sevin" and Chemagro Corporation's "Guthion," a phosphorothioate. Both are relatively more expensive than BHC now, but a cut in price could make them troublesome.

Another problem confronting BHC, and a point around which a pitched battle rages at present: insect resistance. The industry is convinced that insect resistance to BHC, whether a serious factor or not, has influenced a switch in consumer demand to other materials.

Whether or not the pesticide is doing as good a job as it ever was, observers agree, a psychology has arisen among buyers involving the continuous trial of new products.

Here's what the entomology research division of Department of Agriculture has to say about BHC in its thirteenth annual conference report on cotton insect research and control:

"BHC in a dust or spray will control the boll weevil . . ." (Page 18).

"Resistance of cotton pests to insecticides has developed rapidly in recent years . In most cases the pests are resistant to the chlorinated hydrocarbon insecticides . .

"Resistance of most species continues to be restricted to relatively small areas and no species is known to be resistant throughout the range of its occurrence.

**Where Weevil Is Resistant**

"However, the boll weevil is known to be resistant in localized areas of eight of the eleven states in which it occurs from Texas to North Carolina, and resistance is suspected in one other." (Page 14).

The report then lists the boll weevil as resistant to chlorinated hydrocarbons in Alabama, Arkansas, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina and Texas.

"Resistance of cotton pests to recommended insecticides is a serious problem," the report warns. In outlining methods of control, it emphasizes, "This includes the use of pesticides having different physiological modes of action than those to which resistance has been developed . . ."

Thus, for those who believe that BHC is on its way out as an effective cotton pesticide, the government report about wraps it up. But arguments against its disappearance are just as loud.

Insect resistance to BHC has been overplayed—to the advantage of the phosphate insecticide producers, claims one BHC producer. Actually, in most areas, it's as effective as it has ever been.

"It's never been proven that BHC has lost its effectiveness in overall weevil control," another maker insists. Hercules Powder Company, only producer of toxaphene, has run extensive tests on resistance of cotton insects to chlorinated hydrocarbons.

Test results showed there was little indication of insect resistance to toxaphene. In keeping with the theory that once insects become resistant to a single chlorinated hydrocarbon, they become resistant to all materials in the group, this conclusion would mean that boll weevils are no more resistant to BHC than to toxaphene.

"Any tests I've seen where methyl parathion and BHC have been compared," one producer insists, "BHC has shown up well. It's a good product." "BHC at half a cent a gamma," says another, "is the best insecticide bargain today."

**Resistance Argument Rages**

Thus the resistance argument rages. BHC producers who have recently bowed out of the business have these trenchant comments:

- "Insect resistance is definitely a factor. Some cotton consultants in the Mississippi delta area oriented growers, to phosphate insecticides in 1956, because resistance had spread throughout the delta."
- "There's a good chance that BHC demand will be practically non-existent in five years because of resistance. Our field operators tell us some of the phosphate insecticides, particularly methyl parathion, do the job better and cheaper."

If lack of sales promotion and mounting evidence of insect resistance have played some part in the shrinkage of BHC consumption, no less important are some of the economic problems brought about by the struggle of the industry to stay in business.

Back in the good old days, when material listed at 1.3 cents a gamma, there were sixteen producers. Then, increasing pressures brought prices lower and lower until only those manufacturers who had their own chlorine supplies could stay in business.

Of the five active producers today, each has its own chlorine. Industry capacity for BHC is estimated at around 63 million pounds annually—with demand this year forecast at 12.5 million pounds on a gross basis.

If this is the case, it means that producers will be operating only about seventy-five days this year—not a very economical proposition.

Add to this another 20-30 million pounds a year gross of idle capacity, and you come up with something like 80-90 million pounds potential; this despite the fact that since 1951, more than 100 million pounds gross capacity has absented itself from the market!

With such distressing statistics in view, the industry's main weapon has been the price cut. "When Monsanto cut methyl parathion all the way back to 84 cents a pound in October, 1958, it murdered us," concedes one spokesman.

BHC producers thereupon chopped prices to a half-cent per gamma-unit on an f.o.b. basis. It is on this latest price move that those manufacturers remaining in the business hope to maintain—and improve sales volume.

"This low price was reached in the hope of placing in the consumers' hands a reliable product at a lower price than competing materials," one producer says. "Costs are cut to the bone, and economies are satisfying."

Current listing is quoted f.o.b. stock-point in bulk, with the customer hauling it away himself. This is a little different than past practices, where BHC has been sold largely on consignment.

The consignment system has been a headache to BHC producers for several years, and it is only recently, with the posted f.o.b. prices, that the industry has tried to unshackle itself.

Generally, the consignment system works thus: Producers ship technical material to formulators, who do not have to pay for the shipment until it is sold as finished goods. Sometimes the policy even goes as far as application by the grower.

**Origins of the System**

This system was established partly by promoters of new insecticides, who wanted to offer inducements to formulators, some of whom even today reportedly operate on shaky margins. Another contributing factor: storage.

During peak cotton dust season in those days, producers of BHC claimed they couldn't possibly satisfy top seasonal demand directly from production.

Hence, they offered material on consignment to formulators and, in essence, found a warehouse for their material without having to build their own storage facilities.

But the plain fact that the formulator doesn't have to pay the manufacturer for the material until he himself sells it to the ultimate consumer, one BHC producer complains, "violates every sound economic principle I know of."

Other producers still in the business say they're fed up with the procedure, too. Indications are this year that an all-out attempt will be made by the industry to break away from the consignment system—chiefly by setting up an attractive f.o.b. bulk price, while holding consignment bulk prices twenty-two-hundredths cent higher a gamma unit.

"Times have changed, buying habits have changed, the whole market has changed," another producer says. "It's time we gave up on this consignment system."

One observer poses this question: Will consignment prices hold up over f.o.b. prices on a cash basis? The same observer answers by noting that he's never seen it happen in the past.

Another onlooker, whose firm recently bowed out of the market, says, "There's no doubt consignment prices will fall to barrel-head (cash) levels."

Those remaining in the business unanimously vow that they are determined to keep the differential between consignment and f.o.b. cash prices this year.

There is agreement, too, that the half-cent a gamma price for BHC is about rock bottom. At least one producer, on the surface confident that the current price will hold, privately concedes that if the market weakens further, only two, or three at the most, will continue in the business.

There are other problems confronting the industry, aside from those previously mentioned:

- Benzene and chlorine, raw materials, are rising in price.
- BHC has an undesirable smell and care must be taken to keep it away from crops which would be sensitive to its odor.
- It can't be formulated in liquid insecticides as readily as other materials such as methyl parathion—this situation at a time when the switch is toward liquid application.

Spraying, rather than dusting, is becoming more of a factor in the cotton south. This is because of crop diversification. In earlier years, the whole delta was one large cotton field, and could be dusted from end to end by plane.

More recently, with the decline in cotton acreage and increase in yield, dusting has been curtailed because of possible contamination of neighboring crops and livestock—not to mention people.

- Storage problems are encountered with BHC. One producer reports that this material does not hold up as well under storage conditions as do many other pesticides.
- Back in 1954, the government was responsible for a sizable decline in consumption when it ruled out the use of BHC for control of spittlebug infestation on forage crops.

**Exports Will Wither**

- Export demand is expected to wither during the next several years. Mexico, traditionally a substantial consumer of BHC, will be making its own. India has a plant on-stream. Other countries have rising potential.
- Lindane, the ultra-high gamma BHC, is an insecticide with admittedly great potential, and at one time had four producers. Now, only Hooker Chemical Corporation produces it for California Spray-Chemical Corporation, which does the marketing.

This versatile material has shown dra-

—*Continued on page 53*

## BHC BESET BY SOME ECONOMIC BUGS

### Will Cost-Price Squeeze, Pesky Weevils Kill It?

| | BHC Volume (Gross, lbs.) | Number of Producers | Price Per Gamma Unit | Benzene Price Per Gallon | Chlorine Price Per 100 lbs. |
|---|---|---|---|---|---|
| 1960 | *12.5 million | ? | †1/2¢ | 34¢ | $3.15 |
| 1959 | *12.5 million | 5 | 3/4¢ | 31¢-34¢ | $3.15 |
| 1958 | 30.8 million | 6 | 3/4¢ | 31¢ | $3.15 |
| 1957 | 39.6 million | 8 | 3/4¢ | 36¢ | $3.15 |
| 1956 | 84.6 million | 10 | 3/4¢-7/10¢ | 36¢ | $3.05-$3.15 |
| 1955 | 56.1 million | 12 | 3/4¢-7/10¢ | 36¢ | $3.05 |
| 1954 | 76.9 million | 13 | 9/10¢-3/4¢ | 40¢ | $2.93 |
| 1953 | 57.4 million | 15 | 1.3¢ | 40¢-30¢ | $2.93 |
| 1952 | 85.1 million | 14 | 1.3¢ | 30¢ | $2.70 |

*Industry Estimate. Sources: Tariff Commission, OPD's Hi-Lo Chemical Price Issue. †In Bulk, f.o.b. Other Prices in Bags.

## BHC EXPORTS

| | |
|---|---|
| 1960 | *1.5 million lbs. |
| 1959 | *2.2 million lbs. |
| 1958 | 1.5 million lbs. |
| 1957 | 1.9 million lbs. |
| 1956 | 3.4 million lbs. |
| 1955 | 4.2 million lbs. |
| 1954 | 2.3 million lbs. |
| 1953 | 1.8 million lbs. |

*Industry Estimate
Source: Tariff Commission

# Agricultural Chemicals

The US is not alone in trying to find solutions to the many, complex problems surrounding agriculture. Currently, the Commission of the European Economic Community is hard at work charting a farm program for the six Common Market countries—France, Germany, Italy, Belgium, Luxembourg, and the Netherlands. Following discussions with the agricultural ministers of the six nations, the EEC made several broad recommendations and additionally proposed specific programs for ten commodity groups. Of interest to people connected with US agriculture, perhaps, is the commission's wheat plan.

As outlined by EEC, here's what would happen. A European Grain Board would be created. Target prices for wheat would be set annually, and EEC wheat would be assured of a market through (1) obligatory support purchases at the end of the marketing year, discretionary support purchases during the marketing year, and possibly loans; (2) levying on wheat imported from third countries an equalizing fee equal to the difference between the EEC target price and the world market price, and making payments equal to the equalization fee on exported or re-exported wheat; and (3) import licensing within the framework of an annual supply plan.

This plan and those for the other nine commodity groups, as well, is based on the assumption that the six national markets would be merged into one EEC-wide market, having a common agricultural policy. This would be done within a six year period. (The EEC proposals are dealt with at length in the February issue of Foreign Agriculture, a USDA publication.)

**Ammonia**—According to a preliminary report from the Census bureau, December production of synthetic anhydrous ammonia was 419,733 short tons, up from 387,072 short tons in November.

Rise in production was accompanied by a rise in stocks, the Census figures show. At 175,451 tons at November's end, stocks totaled 225,558 tons on December 30.

**Ammonium Nitrate**—Production of original solution ammonium nitrate (100 percent $NH_4NO_3$) amounted to 270,886 short tons in December, against 253,541 tons in November, according to a preliminary report just issued by the Census bureau.

Stocks at December's end, the bureau reports, were 190,656 tons, up from the 179,966 tons held by producing plants thirty days earlier.

**Ammonium Sulfate**—December production of byproduct ammonium sulfate was 136,844,616 pounds, up 43.5 percent from November (95,363,470 pounds), and appreciably above December 1958 output (129,532,000 pounds).

The Bureau of Mines, reporting preliminary statistics of the coke industry in 1959, says that byproduct ammonium sulfate output last year totaled 1,240,528,639 pounds (approximately 620,264 short tons), against 1,280,837,027 pounds (approximately 640,013 short tons) in 1958.

Production of the basic coal chemical materials—crude tar, light oil and ammonia—were each 2 percent lower than in 1958. These decreases, the Mines bureau points out, occurred despite the fact that 1,878,355 tons more coal was charged into slot-type ovens than in the preceding year. Yields per ton of coal carbonized dropped off, however; for ammonia (in terms of sulfate equivalent) yield was about 1 pound lower.

**Animal Proteins**—When fishing seasons on Atlantic and Gulf coasts close, the former preceding the latter by a few weeks, prices for fishmeal and fishscrap usually tend to strengthen. This year, however, the opposite trend has been noted.

At a range of $118 to $122 per ton in October, fishmeal dropped $6 per ton in the early part of December, firmed up briefly toward the end of that month at $115, simultaneously with the closing of all menhaden plants on the Atlantic, then dropped to $106 per ton in January. Last week, prices were still lower, having declined approximately $5, at $105 per ton.

Fishscrap listings, which always rise and fall in tune with meal prices, were $4 lower throughout the successive changes. Last week's quote: $101 per ton.

Poor demand and large supplies explain the downhill road prices have taken, a trade source says. Below average requirements from animal and poultry feed manufacturers is, of course, ultimately responsible.

Slight variations in prices are noted for other of the animal protein materials.

Against an earlier listing of $5, dried blood is currently quoted at a range of $4.75 to $5.25 per unit ton at both New York and Chicago markets. Price spread, like that for tankage at New York ($4.75 to $5 per unit ton), appears to represent bid and asked prices rather than actual transactions.

Used primarily in animal feeds, dried blood and tankage have been in relatively poor demand this season because feed manufacturers have been in bought-up positions almost from the start.

Bonemeal, unchanged at $75 per ton, is said to be in good demand with fertilizer rather than feed demands mainly responsible. Nitrogenous sludge, quoted at $3.50 per unit ammonia and 50c. per unit A.P.A., is also moving well against contract to fertilizer mixers, a dealer here reports.

**Superphosphate**—December production of superphosphate and other phosphatic fertilizers amounted to 238,117 short tons (100 percent $P_2O_5$) compared with December, 1958, output of 215,867 short tons, the Census bureau reports.

Shipments of superphosphate and other phosphatic fertilizers during the month totaled 144,816 short tons, an increase of 3 percent over the volume shipped during the corresponding month of the previous year.

Stocks held by producing plants on December 31, Census says, totaled 363,718 short tons, or 10 percent more than those held thirty days earlier. (Monthly figures, including percentage changes, are unadjusted for seasonal variation and number of working days, Census notes.)

The rain and snow which blanketed the greater part of the nation earlier this month slowed things up a bit, sources say, quickly adding that the current situation is considerably improved. Deliveries of superphosphate against existing contracts are increasing, they report, and barring another siege of unfavorable weather, will continue to do so from here on in.

At present, most shipments of superphosphate—and other agricultural chemicals as well—are headed for manufacturers of mixed fertilizers in the South, particularly Alabama and Florida. Demand should be coming northward, though, as March progresses.

### Price Trends

**Advanced**
None

**Reduced**
None

**Comparative Price Indexes**
(100—1949 average)

| Last week | Prev. week | Last month | Feb. 27, 1959 |
|---|---|---|---|
| 110.30 | 110.30 | 110.64 | 112.29 |

*For Current Prices See Page 11*

### Superphosphate & Other Phosphatic Fertilizer Production

Following are data compiled by the Bureau of Census indicating superphosphates and other phosphatic fertilizer produced and shipped in the United States, January through December, 1959. Included are percentage changes. All material is 100 percent $P_2O_5$ in short tons.

| Grade | 1959 in shorts tons 100 percent $P_2O_5$ Production | 1959 in shorts tons 100 percent $P_2O_5$ Shipments | Percentage change from 1958 Production | Percentage change from 1958 Shipments |
|---|---|---|---|---|
| Normal and enriched | 1,424,430 | 718,793 | +10 | + 3 |
| Concentrated | 886,012 | 892,884 | + 6 | + 9 |
| Other phosphatic fertilizer | 330,227 | 322,376 | +12 | +15 |
| Total | 2,640,669 | 1,934,053 | + 9 | + 8 |


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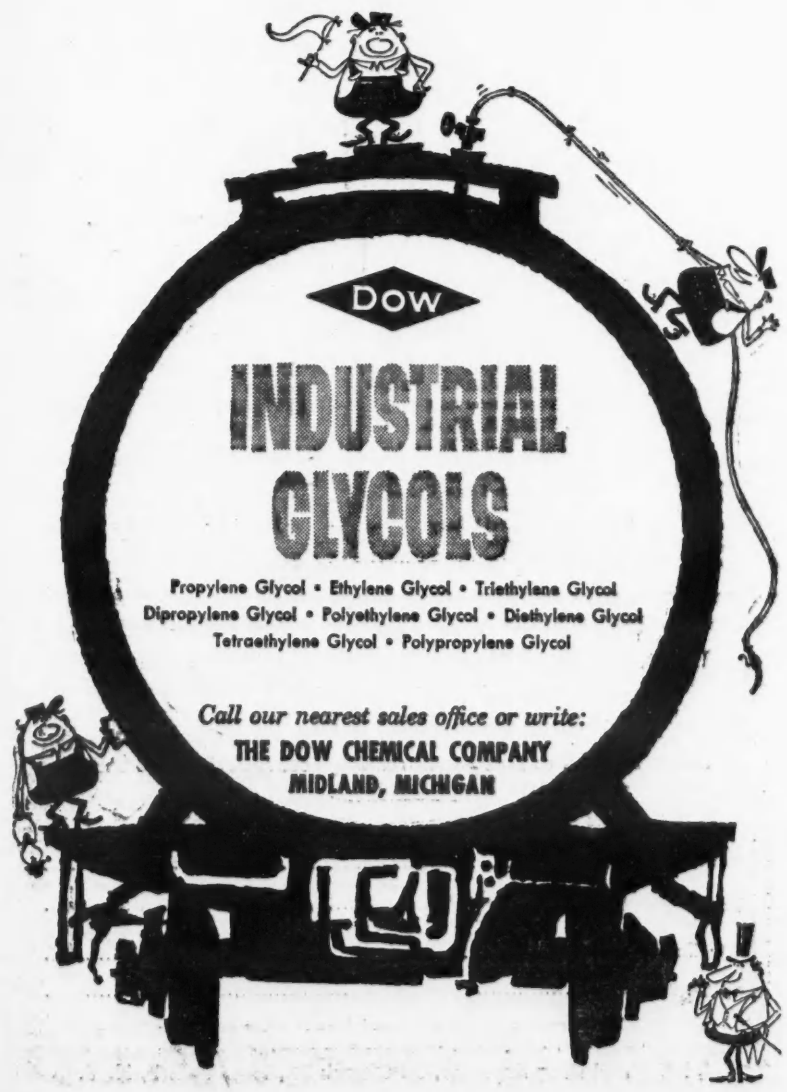
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# Aliphatic Organics

A major chemical producer reported that effective April 1, trichloroethylene will be quoted on a delivered basis in the continental United States. The new terms will not apply in Alaska or Hawaii. Price on tankcars will be 12¾ cents a pound, delivered, as against the current listing of 12 cents a pound with freight equalized. The New Orleans molasses market faltered, blackstrap being quoted ¼ cent a gallon lower in a range of 9¼ cents per gallon. Reductions at this point since the first of the year have totaled 1½ cents per gallon. No other price adjustments were recorded during the week.

A major chemical producer reported that part of a $30 million expansion in organic chemicals, announced last August, is nearing completion at Brandenberg, Ky. Output of propylene oxide and glycol as well as polypropylene glycol has been expected from the unit since the first of the year. Also building at the Brandenberg location is additional capacity of epichlorohydrin and glycerine. The latter will come on the market in about a year.

Trading in acrylonitrile has held up well as consumers were rebuilding inventories. A marked improvement will be forthcoming in the next quarter, sources say, as fiber makers begin to step up their operations.

A basic chemical producer recently announced price reductions in the firm's line of chlorosulfonated polyethylene synthetic rubber. The declines ranged from 10 cents to 23 cents per pound and are effective March 1. This type of synthetic rubber finds use in products which are required to withstand acids, solvents and other chemicals.

Trade sources have continued to report good movement of large volume aliphatic chemicals. Diversified end-use patterns for most of these materials protected them against serious dislocations from the four-month steel strike.

**Acetonitrile** — Effective tomorrow (March 1), bulk price of acetonitrile will be 32c. per pound, delivered, as against the previous 43c. per pound price on a works basis. Similar reductions will be made in drum lot quantities.

**Acrylamide** — Price was quoted unchanged at 58c. per pound in truckload quantity, while less truckload lots are 60c. per pound. Prices are on an f.o.b. works basis.

**Acrylates**—Prices remain steady at previously reported levels. New capacity has been added to this market in the past year and more is expected momentarily. Methyl, ethyl and butyl acrylates are moving in steady volume. 2-Ethylhexyl acrylate remains in good demand.

**Acrylonitrile**—Trading has continued to hold up well as consumers have been rebuilding depleted inventories. Trade sources expect a marked improvement in the next quarter as fiber makers begin to step up their operations in earnest.

**Epichlorohydrin**—Withdrawals for use in epoxy resins remains routine. Total production of epoxies in November amounted to 4.5 million pounds with sales of 3.7 million. A breakdown of sales for the month indicates that 1.8 million pounds went into protective coatings while 1.9 million went for other uses, according to report of the Tariff Commission.

**Ethanol**—Report of the Internal Revenue Service noted use of ethanol in making chemicals amounted to 188.7 million gallons for the fiscal year ended June 30, 1959. Of this total, 138.1 million gallons went into production of aldehydes. Current withdrawals have been routine with perhaps a slight upturn noted this month over last, sources report.

**Ethylene Glycol**—A chemical producer reported that prices for its trade named anti-freeze solution would remain unchanged for the coming year. New contracts at current levels will be made, effective April 1, it was said. The market has maintained a steady price structure despite increased production costs.

**Formaldehyde**—Trade sources report a slight uptrend in resin volume during the past month. Withdrawals during January were fairly steady, according to report in most quarters. The delayed effects of the steel strike plus the fact that some business came in during December that was not expected are accounted as partially responsible for a leveling out.

The buildup in steel supplies plus a general return to high level industrial activity is expected to boost sales volume during the coming months. Last price change in the market was a ¼c. per pound advance in July of last year.

**Glycerine**—Alkyd resins outlet has improved as phthalic anhydride has become more plentiful. The latter material is still on allocation from major producers, but the critical short supply position of last fall has been alleviated.

Sales of glycerine to major consumers in cosmetic, tobacco and resins markets has been fairly well maintained, although the usual seasonal slump was noted last month. Sources noted a slight uptrend this month which is expected to gain momentum through the balance of the quarter.

**Methanol**—Captive use of methanol for conversion to formaldehyde, antifreeze, methylamines and other chemicals has continued on the increase, sources report. Sales to the free market in a recent year amounted to only about 40 percent of a total production estimated at a little more than 300 million gallons annually.

Antifreeze use has remained on the downgrade as a result of the widespread use of ethylene glycol for this purpose. However, continued growth of the formaldehyde market through development of new resins based on its use and use of formaldehyde in resins with other chemicals, has formed the main basis of support for this market.

**Molasses**—Feeding cane molasses markets were steady with the exception of New Orleans where prices were unchanged to ¼c. per gallon lower, according to report of the Department of Agriculture. Buyers were cautious about making new contracts and demand was slow. Demand was moderate to good in the coastal states helped by snow in some areas and cold weather generally. Scattered sales were reported in the midwest at ¼c. per gallon less than previous report.

Venezuela is reported to have completed arrangements for importing about seven million gallons of blackstrap molasses from Cuba. The original contract, made in '59 at 11c. per gallon, provides for a 2½c. per gallon downward adjustment, it was said. Deliveries are to be completed by the end of May.

Louisiana blackstrap production for the 1959 season was reported at 28,258,331 gallons, according to report of the Agricultural Stabilization and Conservation Service. This compares with actual production in 1958 of 27,885,280 gallons.

Sugar cane harvest in Florida, started in October, is expected to continue into May of this year. Some cold weather damage is reported to harvested cane. Production of both sugar cane and blackstrap in Florida for the entire 1959-60 season is expected to be substantially above the previous season.

**Propylene**—A petrochemical producer came on stream this month with a $2 million propylene plant at Marcus Hook, Pa. The unit, capable of producing 120 million pounds a year, produces propylene by fractionation of propane, ethane and butane from catalytic cracking plants and gas stabilization units. The facility is reportedly the largest in the United States.

**Propylene Glycol**—New capacity is expected on stream momentarily at Brandenberg, Ky. Plans for output of propylene glycol and oxide as well as polypropylene glycol are reported nearly complete. Also building at the same location is capacity for glycerine and epichlorohydrin. The units are part of a $30 million expansion plan in organic chemicals announced by a major chemical producer last August.

In December, the industry recorded price declines ranging from ½c. to 1c.

## Price Trends

**Advanced**
None

**Reduced**
Molasses, New Orleans, ¼c. per gal.

**Comparative Price Indexes**
(100=1949 average)

| Last week | Prev. week | Last month | Feb. 27, 1959 |
|---|---|---|---|
| 132.54 | 132.54 | 132.85 | 130.67 |

*For Current Prices See Page* 11

# Aliphatic Organics

per pound on propylene glycol and oxide as well as di- and tripropylene glycols.

**Sucrose**—Bureau of Census reported manufacturers in the cane sugar refining industry shipped products valued at $997 million in 1958, a 15 percent increase over the last survey made in 1954. Average employment showed a 5 percent drop while adjusted value added to the industry totaled $185 million in '58, a 39 percent increase.

Total production of refined cane sugar in 1958 was 5,768,042 short tons and shipments amounted to 5,692,753 tons. Value was reported at $988,155,000.

**Trichloroethylene**—Effective April 1, a major producer will put this material on a delivered basis in continental United States, excepting Alaska and Hawaii.

New schedule for the material will be as follows: tankcars, 12¾c. per pound; tankwagon, 2,000 gallons minimum, 13¼c. per pound; carload or truckload of drums, 14c. per pound and less carload drum lots 15¼c. per pound.

The industry currently lists trichloroethylene on a freight equalized basis and price on tankcar quantity is 12c. per pound; carload or truckload of drums, 13c. per pound; less carload lots, 15c. to 16¾c. per pound.

Material finds its main use as a metal degreasing agent. Output in November, latest month for which Tariff Commission figures have been issued, was 30.9 million pounds. Production in the first eleven months of last year totaled 331.2 million pounds.

**Vinyl Chloride**—Resin use of vinyls continues on the upgrade. A vigorous outlet last year was to solid vinyl flooring. In this area, a major rubber producer has reported that capacity will be substantially expanded this year in order to take care of an estimated 15 percent increase in sales of vinyl flooring. Sources have continued to report a trend to all-vinyl compounded flooring.

Sales of vinyl resin for adhesives use in November amounted to 4.7 million pounds compared with 1.9 million pounds used in protective coatings and 11.2 million for other uses.

## *Phthalic Price Hikes*

—*Continued from page 3*

tankcars, f.o.b. works, freight equalized, and 21 cents a pound, drums, carlots, same basis, effective April 1.

Why the different prices? One spokesman, noting that the market is drum-tight, and that material is still on allocation, points out that there are plenty of customers willing to pay the higher prices

Other members of the industry are mulling over the boosts. While the price increases aren't uniform or on an industry-wide basis as of press time, some in the trade think it's a good move.

And if matters aren't unsettled enough already, there is still strong sentiment against any kind of price rise at this time.

Ralph T. Urich, vice-president of sales, commenting on Reichhold's price move, says the issue is simple: Naphthalene, phthalic's raw material, is in short supply, and its cost is continually increasing.

It's reported that demand both here and abroad is very strong for phthalic. Europe, which sent a large volume of PA here during the steel strike, now finds itself strapped to keep up with its own needs. Hence, it's a customer—at even higher prices than those posted last week.

Reverberations will take a while to reach all segments of phthalic's area of influence. Burning question right now: Will naphthalene go up—and if it does, will more petroleum producers beside Ashland Refining Company and Sun Oil Company get into production?

Doubtless the PA increase will be responsible for almost immediate increases in its esters, notably DOP and other plasticizers, say industry sources. Alkyd resins and polyesters will also be put under pressure.

## *President Gets His Way*

—*Continued from page 3*

tivities. Here's why the President thinks so:

"It would tempt municipalities to delay essential water pollution-water abatement efforts while they waited for federal funds."

Besides, Mr. Eisenhower said, "primary responsible for solving the problem lies not in the federal government but rather must be assumed and exercised, as it has been, by state and local governments."

While conceding that polluted water "is a threat to the health and well-being of all our citizens," the President felt that a non-federal tack must be taken on the problem. This is the way he sees it:

"Pollution and its correction are so closely involved with local industrial processes and with public water supply and sewage treatment that the problem can be successfully met only if state and industry assume the major responsibility for cleaning up the nation's rivers and streams."

To help relieve "the pollution blight," Mr. Eisenhower said he is asking the Secretary of Health, Education & Welfare to call a national conference on water pollution in December.

He will also urge congress to strengthen the enforcement provision of the present water pollution law and, he said, he promises:

- "Modest financial assistance." for the administration of state and interstate pollution control problems.
- More research and technical aid in this field.

## *Chemical Forecast*

—*Continued from page 4*

continue its growth at a rate greater than the overall economy."

"A continued supply of raw materials at a fair cost is essential," Dr. Bateman notes. "There is no question but that required quantities of raw materials can be made available from some source, but the value placed on such hydrocarbons by producers can have a significant effect on the costs of finished chemicals, which in turn will determine the expansion of chemical markets."

In addition, the tempo of both basic and applied research must be accelerated in the 1960's if the industry is to develop new products and processes to thwart the always prevalent obsolescence. "The research departments of the industry must keep in mind and practice three basic rules," he points out.

**Must Create New Products**

"They must create new products to satisfy human needs, they must create synthetic products which will out-perform natural products, and they must create new processes to make the first two possible." In turn, an adequate and profitable ratio between capacity and demand can only be achieved by timing expansion of facilities so that markets will consume the organic chemicals produced, the Carbide man believes.

Anticipating that competition from foreign sources will continue to increase in the 1960's, the industry's problem is twofold. Continued profitable sales to foreign countries can be maintained by producing new materials for export, and by reducing costs utilizing our own technological advances, says Dr. Bateman.

## *USI Is Set to Become*

—*Continued from page 3*

pounds? The company is banking on broad increases in all established end-uses. In addition, a big stride forward is expected in some of the newer categories, such as wrapping for bakery products.

Last year's sales of "Petrothene," USI's trade-named polyethylene, were brisk enough to establish it as the division's largest selling product.

"Demand was good throughout the year," a report from the company states, "although toward the end some customers were affected by the steel strike since expected machinery deliveries failed to materialize."


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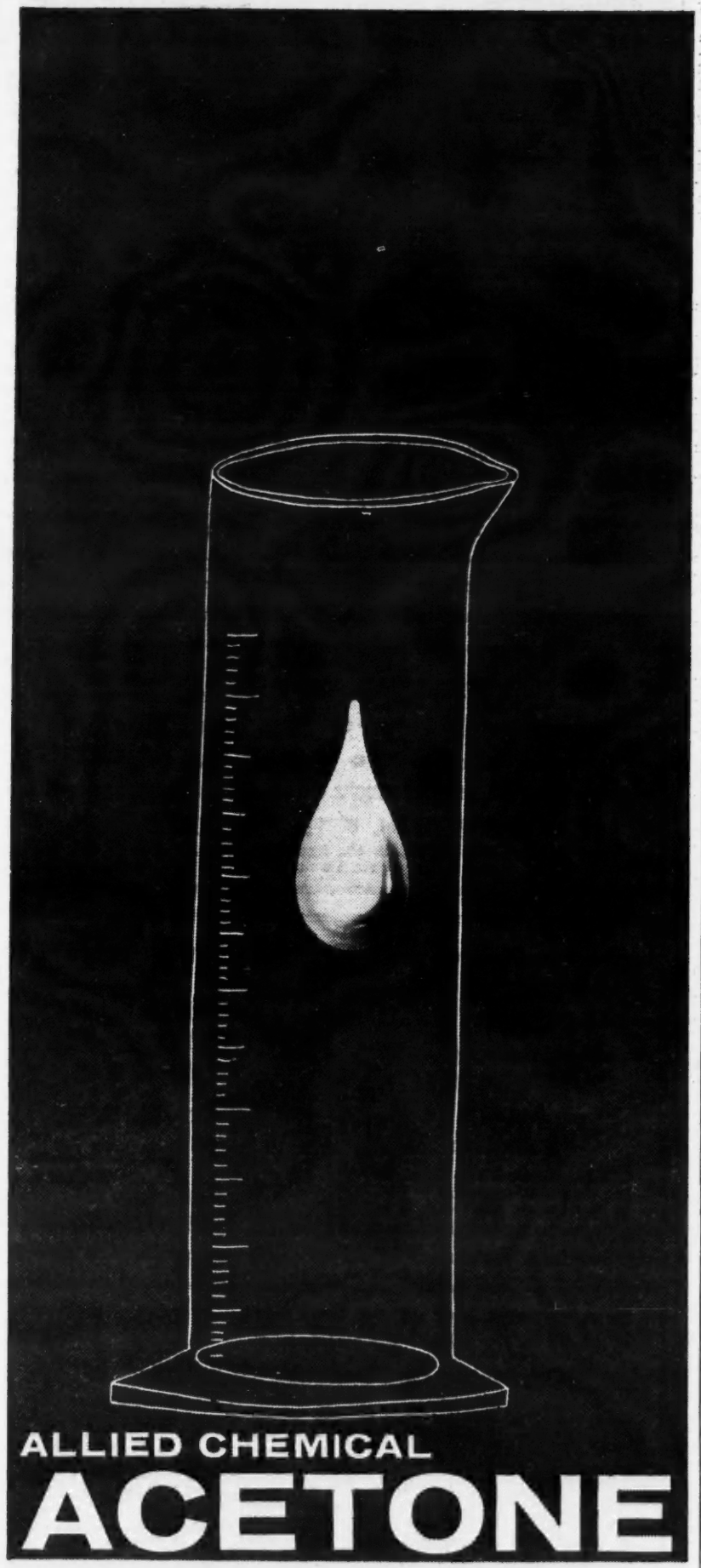


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# Coal Chemicals

A major producer reported an advance of 2 cents a pound across the board on phthalic anhydride, effective immediately on spot and April 1 on contracts. The advance will put tankcar price on molten phthalic at 18½ cents per pound and flake material in carload lots at 19 cents. Another producer, who posted a 2 cent increase in PA prices last October, raised the ante 2 cents more last week. New price for molten material from this source will be 20½ cents a pound, with flake phthalic in carload quantity at 21 cents.

Phthalic, which is still on allocation moved into a critically tight supply position during the lengthy steel strike. In early November, some units were reported operating at 50 percent of capacity or less. A 4 cent price drop in February, 1959, trimmed profit margins during a year of vigorous demand and tightening supply. In addition, integrated producers were hit with simultaneous price drops of 2 to 4 cents in phthalate plasticizers and a 2 cent decline in naphthalene, raw material for phthalic.

Should the rise in phthalic anhydride go industry wide, the possibility of increases in isophthalic acid, phthalates and naphthalene will be up for consideration. On naphthalene the interest of petroleum companies in entering the market will weigh against a price increase, sources say.

Annual report of the Bureau of Mines indicated production of basic coal chemicals (crude tar, light oil and ammonia) was about two percent lower last year than in 1958. Yields were reported substantially lower as preliminary figures indicated the tar yield dropped about 0.4 of a gallon per ton of coal carbonized; crude light oil, 0.2 gallon and ammonia in terms of sulfate equivalent, about one pound. Production of light oil and tar derivatives was slightly lower than '58, but demand was very good and stocks at the close of the year were lower than the preceding year on virtually all products.

Coal chemicals research may get a boost from the government as a result of a bill just passed by the house and sent on to the senate. The bill would establish a research program in the Department of Interior to stimulate investigation of coal and coal products.

The American Iron and Steel Institute estimated that steel production in the week ended February 28 would amount to 93.7 percent of theoretical capacity equivalent to 2,671,000 net tons of steel. Output in the previous week was 2,674,000 tons, 2,717,000 tons in the comparable week one month ago and 2,506,000 net tons in the corresponding week one year ago.

## Price Trends

**Advanced**
None
**Reduced**
None
**Comparative Price Indexes**
(100=1949 average)

| Last week | Prev. week | Last month | Feb. 27, 1959 |
|---|---|---|---|
| 118.40 | 118.40 | 118.40 | 118.55 |

*For Current Prices See Page 11*

## Basic Products

**Benzene**—Material is in tight supply, but producers have continued to make progress in their struggle to restore supply-demand balance. Pressure has been relieved as capacity of cokeoven and petroleum producers is fully adequate for trade needs.

The long view was taken by a major benzene consumer who reported that the firm's bulk styrene monomer price would be lowered 8/10c. per pound, effective July 1 of next year. This, despite a 3c. per gallon advance in benzene costs January 1 of this year.

The production of cokeoven benzene last year was 1.6 million gallons more than in the previous year despite the four month steel strike. Output totaled 119.7 million gallons as against 118.5 million gallons in 1958.

**Solvent Naphtha**—Production of crude and refined solvent naphtha from cokeoven sources last year amounted to 3,978,549 gallons as against 4,419,272 gallons in the previous year, according to annual report of the Bureau of Mines.

Stocks on hand at producing plants at the close of December were reported at 475,093 gallons as opposed to 406,931 at the beginning of the month and 376,076 at the end of December, 1958.

## Dyes

**Dyes**—A producer reported introduction of "the first group of a new range of reactive dyestuffs." The new products have been developed especially for printing cotton and viscose filament and staple fiber.

Printing pastes of the new line, trade named "Drimarene-Z," show good stability and are reported to have shown no decomposition effects and no precipitation after storage for a period of weeks.

Materials exhibit little or no affinity for cellulosic fibers. An advantage of this property is that it prevents take-up of loose dyestuff from washing baths and thus eliminates the danger of subsequent staining on unprinted parts of a design.

In rollar and screen printing the materials possess all the essential properties of reactive dyestuffs. They form a stable chemical linkage with the fiber resulting in high wet fastness and can be printed alongside dyestuffs of other classes.

## Intermediates

**Chlorobenzaldehyde**—Truckload lots of o-benzaldehyde list at $1.05 per pound, while less truckload is $1.20 per pound. Prices are on an f.o.b. works basis.

Less carload price of p-chlorobenzaldehyde is $1.95 per pound. Listing for the para isomer is also on an f.o.b. works basis.

**Dodecylbenzene**—Price of this large-volume intermediate used in the manufacture of synthetic detergents has remained fairly steady. Keen competition among suppliers has pressured profit margins.

Tankcar price is quoted at 11c. per pound while the price of carload or truckload of drums is 13.4c. per pound and less carload quantities list at 14.4c. per pound.

Production in the first eleven months of last year ran to 446.8 million pounds, 38.5 million pounds more than in the comparable period of 1958.

**Isophthalic Acid** — Price of this material has been maintained on a mole ratio with phthalic anhydride. Should the phthalic advance reported last week go industry wide, it is probable that isophthalic will be advanced.

Increased use of isophthalic in the past year has prompted the producer to create a new division for the sale of surface coating and plastic chemicals.

Establishment of the new unit is a further step in the overall vertical sales reorganization being carried out by the company. It is felt that the new set-up will enable the company to offer more specialized service to consumers.

**Melamine**—Wet-strength, kraft paper bags, fortified with the melamine resin marketed by a major producer, were demonstrated to 3,000 paper-makers in New York during observance of National Paper Week (Feb. 22 to 26).

As grocery bags, the treated paper will resist rain, leaky milk cartons or fresh vegetables which may happen to be damaged in transit. Suggested re-uses for the bags, once their primary job is accomplished, include toys or school book covers for the children, aprons, party decorations and baskets.

The melamine resin process for treating paper was developed during World War II and was used to provide waterproof, tough maps for the military. Since the war, paper towels and similar products have been given some wet-strength and made relatively lint-free by addition of small amounts of melamine. Paper bath mats, slippers and dust cloths have been coming into use, the company reports.

**Pentachlorophenol**—Price advances in creosote have increased the differential between it and this material. Some sources feel that for this reason penta has become increasingly more attractive to users for some applications. However, in other quarters it is felt that each will continue to find applications where specific properties make one or the other the material of choice.

# Coal Chemicals

**Phthalic Anhydride**—A major producer announced a 2c. per pound across the board advance in the price of phthalic anhydride, effective immediately on spot and April 1 on contracts.

Under new schedules, molten phthalic will be 18½c. a pound; carload or truckload of flake material, in bags, 19c. and less carload or less truckload, same packing, 20c. a pound.

Another producer, who boosted the price of PA 2c. a pound last October, raised the price 2c. more last week. New price from this source will be 20½c. for molten, 21c. per pound for flake material in carload and 22c. in less carload quantity.

The latter schedule is the one prevailing in the trade in late January, 1959, when a 4c. reduction was posted. At that time, integrated producers were also faced with reductions of 2c.-4c. per pound on phthalate plasticizers and a 2c. drop in naphthalene, raw material for phthalic anhydride. Should the advance go industry-wide, advances in isophthalic acid, phthalates and naphthalene will be up for consideration.

From August, 1958, until the price drop in January, the market went through a period of listless hand to mouth buying and rumors of price shading, as it was expected that 17c. phthalic would be made available from a new petrochemical unit in the midwest. However, efforts to bring this plant on stream at Joliet, Ill., have been stymied to date.

**Styrene Monomer**—A basic producer, with a 200-million pound styrene expansion in the works, believes long-range production economies will enable it to keep the price of monomer well below the 12c. level. As an indication, the company reports that effective July 1, 1961, the price of monomer in bulk will be set at 11.2c. per pound. This is an 8/10c. reduction from the current 12c. price.

## Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ended February 28, was as follows:

| | | |
|---|---|---|
| Ammonium liquor | lbs. | 844,886 |
| Ammonium sulfate | lbs. | 35,532,156 |
| Benzene | gals. | 3,426,482 |
| Coaltar | gals. | 18,628,339 |
| Crude chemical oil | gals. | 547,611 |
| Solvent naphtha | gals | 109,522 |
| Toluene | gals. | 766,655 |
| Xylene | gals. | 219,044 |

Escalation contracts call for price adjustments in this market each quarter based on costs of labor and raw materials. Trade sources have indicated they felt the 3c. per gallon benzene increase of January 1 would not be fully reflected in the styrene market before July of this year.

The announcement comes in the wake of a spate of new construction and expansion reports which have hit the market since the first of the year. A major question in styrene has been whether the big petrochemical firms would decide to put excess benzene to work making styrene. For the time being, oil companies are having no trouble marketing benzene due to the shortage created by the four month steel strike.

However, the capacity to produce benzene is still available and, in fact, has been added to since last summer. Chemical companies countered a rubber producer's plan to get into styrene in 1956 with a 4c. reduction from the then held 16c. price. Admittedly, the petrochemical industry is a different breed, sources say. In any case, the half billion pounds of styrene production to be added by chemical firms during the next two years plus the approximation of an 11c. price serves notice on newcomers that competition for synthetic rubber and plastics markets will be keen.


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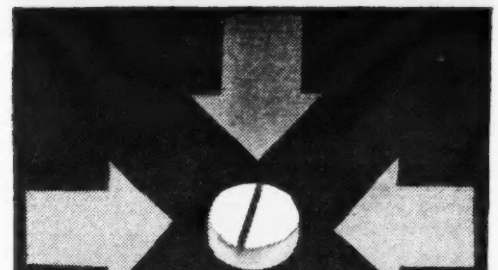

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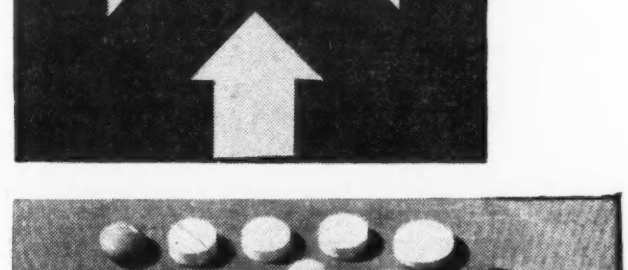

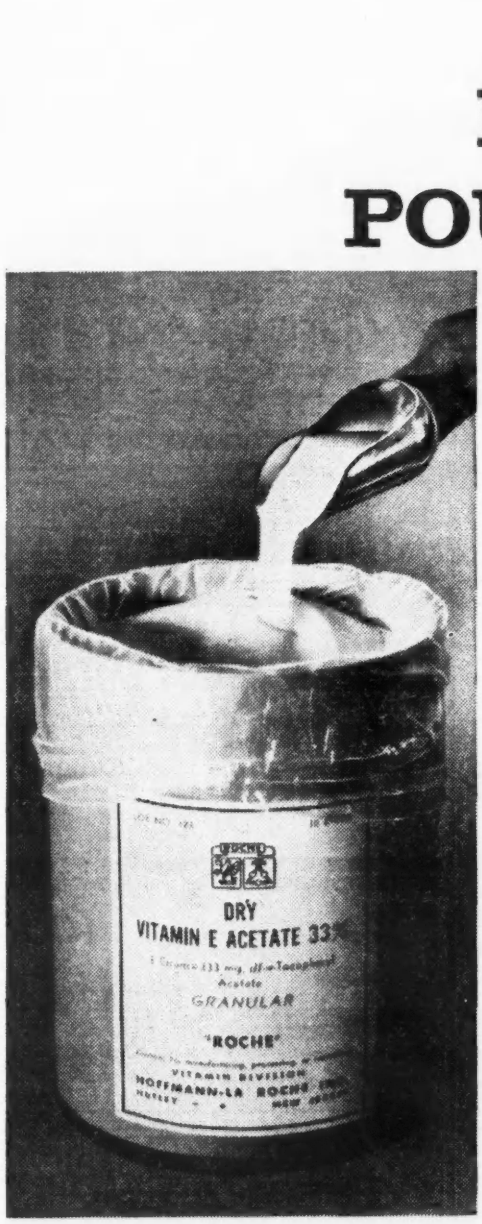


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Rely, too, on Roche Process, Roche Progress for *liquid forms* of vitamin E — *Vitamin E Acetate Roche* [dl-alpha-Tocopherol (yl) Acetate]. 1 milligram equals 1 International Unit. This is the International Reference Standard for vitamin E. *Vitamin E Roche* [dl-alpha-Tocopherol (unesterified)]. 1 milligram equals 1.1 International Unit. The latter, as you know, has a highly useful antioxidant, as well as vitamin E, value.

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# Drugs, Fine Chemicals

Two price changes last week. Lemon bioflavonoid complex, a citrus extract, was reduced, Brazilian menthol advanced. The reduction, amounting to $1.25 per pound on 100-pound quantities, folllowed disclosure of a new bioflavonoid compound, "CVP," which appears to have much potential marketwise and medically. "CVP," its developer reports, has been found seventy-five percent successful in saving infants threatened by "Rh-factor poisoning." Thus far, tests undertaken with pregnant women, known to have Rh antibodies in their blood, have been on a rather small scale; consequently, it's advised that final conclusions are not yet in order.

Brazilian menthol prices are way up and could go higher. An importer here reports sales for shipment at $8.35 to $8.40 a pound for large crystals, at $8.25 a pound for regular crystals. Domestic stocks, he believes, are generally small and under pressure because offerings from Brazil are very limited. To make matters worse, bad weather has restricted first cutting of the new peppermint crop.

Japanese menthol, where and when available, is selling at anywhere from $10.50 to $12 a pound. Offerings are almost non-existent.

Menthol demand, as noted in this space a few weeks ago, has boomed with the increasing quantities of the material going into mentholated cigarettes, and other "cool" items.

"Chem'pen," a synthetic penicillin, chemically the same or similar to "Syncillin" and "Maxipen," is now being marketed by a leading pharmaceutical house, a long time wholesaler and retailer of drugs and fine chemicals. It's understood that the firm will continue to offer its line of bulk fermentation penicillins while retailing the synthetic to doctors, druggists, and hospitals.

Reported to be in short supply are several imported items; among them, atropine, hyoscyamine, strychnine and theobromine. Prices have shown increasing strength. Also stronger, quinine sulfate. The government's refusal to sell its stockpiled quinine may have something to do with this.

**Hyoscyamine**—Raw material shortages have resulted in correspondingly tight supply situations for hyoscyamine hydrochloride and hyoscyamine sulfate.

Quoted at $7 an ounce, both materials are in relatively good demand, which is the second factor behind the currently strong market. Indicated, perhaps, are higher prices.

Alkaloid is said to be selling at $10 an ounce, or at $9 an ounce for 25-ounce lots. There isn't much call for alkaloid, of course.

**Lemon Bioflavonoid Complex**—A producer has posted substantially lower prices for lemon bioflavonoid complex.

Down $1.25 from the previous listing, the material is now priced at $6.45 a pound for a 100-pound package. Other quotes representative of the new schedule: 25 pound package $6.50 a pound; 5 pound package $7 a pound; 1 pound package $7.50 a pound.

Announcement of the price reduction followed fast a report that a new application for bioflavonoids was under investigation and already looked highly promising. Just possibly, there was a connection between the two developments.

When introduced some years back, the bioflavonoids, which are citrus extracts (lemons, grapefruit), were billed as cold remedies. As such, they gained a measure of popularity for a time.

But, although the market soured, laboratory work on the materials continued. Out of this research, a new application resulted—on the surface, a major accomplishment for the drug industry.

Today, reportedly, infants threatened by "RH-factor poisoning" are being saved by a bioflavonoid compound called "CVP."

"CVP," it's said, strengthens the infant's resistance to invasion of antibodies from the mother's blood by building up capillaries and inhibiting the RH antibody interchanged.

In one test, thirty-two pregnant women who received "CVP" produced twenty-four surviving infants—75 percent successes.

Marketwise, and especially medically, "CVP" appears to have great potential.

**Menthol**—Menthol prices are way up and will go still higher, according to trade reports, barring unforeseen developments.

Reported last week were sales for shipment at $8.35-$8.40 a pound for large crystals, at $8.25 a pound for regular crystals.

Stocks here are said to be meagre, offerings from Brazil few and far between. And to make matters worse, bad weather has restricted first cutting of the new peppermint crop.

Japanese material, also in very limited supply, is quoted at a range of $10.50 to $12 a pound; laevo synthetic at $7.50, racemic at $4.50.

As noted in this space a few weeks ago, the US is off on a menthol kick. Mentholated cigarettes, mentholated shave creams and mentholated sundry items have become increasingly popular, giving menthol demand a terrific boost.

Cigarettes, for example, currently take an estimated 450,000 pounds of an estimated 1.2 million pound domestic menthol market. And this figure reportedly is rising. All that's needed now is a sufficient supply of menthol.

**Penicillin**—While there's been considerable optimistic talk about the future of synthetic penicillins, reports substantiating these claims have yet to be received. All one has to go on—and this may be

### Price Trends

**Advanced**

None

**Reduced**

Lemon bioflavonoid complex, 100-pounds, $1.25 per lb.

**Comparative Price Indexes**

(100=1949 average)

| Last week | Prev. week | Last month | Feb. 27, 1959 |
|---|---|---|---|
| 60.21 | 60.22 | 60.22 | 61.15 |

*For Current Prices See Page 11*

### Drug and Fine Chemical Imports: 1959

Imports of selected drugs and fine chemicals for the year 1959, based on monthly reports issued by the Bureau of Census, were as follows:

| | | 1959* | 1958** |
|---|---|---|---|
| Caffeine | lbs. | 1,176,729 | 556,488 |
| Camphor: | | | |
| Refined | lbs. | 155,864 | 66,032 |
| Synthetic | lbs. | 311,285 | 125,930 |
| Iodine, crude | lbs. | 1,466,238 | 1,560,937 |
| Menthol: | | | |
| Natural | lbs | 753,292 | 760,977 |
| Synthetic | lbs. | 87,346 | 68,459 |
| Quinidine & salts | ozs. | 978,868 | 980,200 |
| Quinine sulfate | ozs. | 745,726 | 630,294 |
| Saccharin | lbs. | 301,999 | 237,264 |
| Sodium alginate | lbs. | 724,166 | 284,567 |
| Tartaric acid | lbs. | 3,079,015 | 2,913,096 |
| Theobromine | lbs. | 59,054 | 85,784 |
| Vitamins and vitasterols: | | | |
| Animal origin | lbs. | 3,049 | 2,738 |
| Other origin | lbs. | 769,501 | 288,876 |

* Estimated.
** Actual.


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## Drugs, Fine Chemicals

enough—are three clues: "Syncillin," "Maxipen," and "Chemipen."

These three, thought to be the same chemically, are the current entrants in the synthetic penicillin race.

"Syncillin" came first. Widespread publicity signalled its November, 1959, debut, provoking the announcement of "Maxipen," which is soon to reach the market.

"Chemipen," to be sold to doctors, druggists, and hospitals, was announced fortnight. It is being marketed by a leading pharmaceutical house, a long time wholesaler as well as retailer of drugs and fine chemicals. Assumedly, the firm will continue to offer its line of bulk penicillins, "Chemipen" to be an adjunct—perhaps a competitive necessity.

It's understood that it's economically feasible to make synthetic penicillins if fermentation facilities are available. This is because manufacture of a synthetic involves stopping the fermentation process at a certain point and adding a synthetic chemical chain to the basic skeleton (6-aminopenicillanic acid).

Like its competitors, "Chemipen" is taken orally, achieves high blood levels, and can resist germs no longer frightened by fermentation penicillins.

**Quinine**—While General Services Administration was negotiating the sale of the government's quinine stockpile (13.8 million ounces, mostly sulfate powder) a short while back, certain European suppliers reportedly dropped prices. Then, when the sale fell through (a very surprising development, to be sure), heaving a sigh of relief, they boosted prices once again.

Next probable development: further strengthening of prices here. Assumedly, GSA will not be selling its quinine immediately. There could be any number of reasons why.

**Strychnine**—Trade reports indicate that strychnine sulfate is in tight supply, with no easing likely immediately. So, as one might suspect, prices are firm.

Alkaloid is also short, offerings limited. Prices are strong.

**Tartrates**—Price changes have not been reported, nor are any expected. Nonetheless, it appears that the market is rather competitive.

Demand for both tartaric acid and cream of tartar is brisk, supplies adequate.

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## Botanicals

Demand for botanicals is quite active with particularly strong interest noted for agar, belladonna leaves and root, Hungarian-type chamomile flowers, henbane leaves, colchicum seed, and witch hazel leaves. With the exception of the last two items, supplies are adequate. Botanical prices, in general, are firm.

Imports detained by the Food and Drug Administration at the Port of New York during the two week period ended February 12, included 750 bags of juniper berries and 6 lots (258 cases) of papain.

**Agar**—Prices for USP Kobe No. 1 strip are purely nominal because little if any material is currently available. New crop should be arriving here shortly, however.

Good demand is reported for the USP powder with sales being made at $2.40 a pound.

**Belladonna**—Strong demand is noted for both belladonna leaves and belladonna root. Quotes are, respectively, 26c. and 28c. a pound. Dealers' stocks are adequate.

**Chamomile Flowers**—Trade reports indicate that demand for Hungarian flowers is excellent. Roman material is relatively inactive, in contrast.

Prices are $1.25 a pound for the Hungarian, $1.50 to $1.75 for the Roman.

**Colchicum**—Prices for colchicum seed are high, ranging from a low of 75c. a pound to a high of $1.25. Stocks are very small.

Colchicum root is listed at 30c. to 35c. a pound.

**Henbane Leaves**—Listing is 35c. to 40c. a pound and firm. Interest reportedly is strong, stocks adequate to fill requirements.

**Witch Hazel Leaves**—While demand is active, supplies are limited. This means, of course, that prices are strong. Current range: 28c. to 30c. a pound.

### *Veterinary Chemotherapy Offered on LP Records*

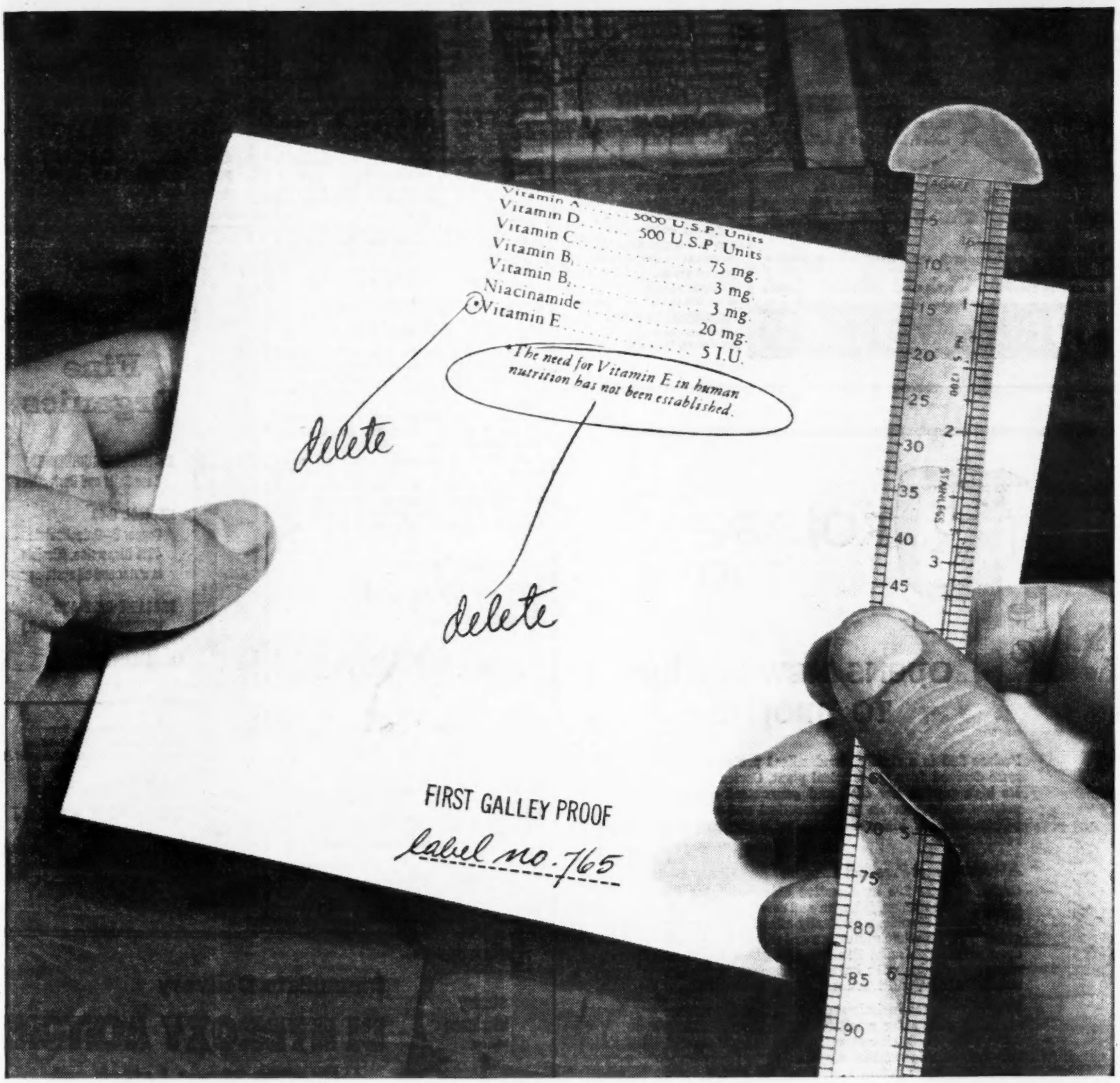
The latest in veterinary chemotherapy can be learned from two long-playing records, available from Eaton Laboratories.

As an aid to education, the Norwich, N.Y., firm has recorded highlights of speeches presented at the regional conference on nitrofurans in veterinary medicine, held recently in Madison, Wis.

Entitled "New Horizons in Chemotherapy," the two-disc album is being distributed by Eaton to all veterinary medical and state associations in the US.

Copies of the album are available for loan upon request to the company's veterinary medical division.

The conference was held under the joint auspices of Eaton and the Wisconsin Veterinary Medical Association.


Vitamin A ..... 5000 U.S.P. Units
Vitamin D ..... 500 U.S.P. Units
Vitamin C ..... 75 mg.
Vitamin B1 ..... 3 mg.
Vitamin B2 ..... 3 mg.
Niacinamide ..... 20 mg.
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*The need for Vitamin E in human nutrition has not been established.
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The new official status of vitamin E* makes it no longer necessary to indicate on labels that the need for vitamin E in human nutrition has not been established. That's a job to attend to with the printer.

The job we'd like is providing technical assistance to the drug manufacturer who sees reason, in the new status of vitamin E, for reviewing his multivitamin formulations. Should you like to discuss this further, or see information on any of the vitamin E products listed at the right, get in touch with ***Distillation Products Industries,*** Rochester 3, N. Y. Sales offices: New York and Chicago • W. M. Gillies, Inc., West Coast • Charles Albert Smith Limited, Montreal and Toronto.

*Federal Register, October 29, 1959, Page 8792

**1.** *Mixed Tocopherols Concentrate N. F.*—A favorite for soft-shell capsules ever since pharmaceutical practice adopted a standard ingredient to represent the tocopherols found in nature. Type 4-34 has a biological potency of 253 I.U. per gram; Type 4-50 delivers 372 I.U. per gram. Provides antioxidant activity as well as vitamin E activity.

**2.** d-*Alpha Tocopheryl Acetate Concentrate N. F.*—To meet your label claim of vitamin E unitage in a volume of oil you choose for manufacturing convenience. Can withstand atmospheric oxygen. Type 6-25 provides 340 I.U. per gram; Type 6-35 delivers 476 I.U. per gram.

**3.** d-*Alpha Tocopheryl Acetate N. F.*—Type 6-100 gives maximum dosage in minimum oil. Highest biopotency of any commercial vitamin E preparation—1360 I.U. per gram.

**4.** *Crystallina* d-*Alpha Tocopheryl Acid Succinate*—Dense, smooth-flowing powder for tablets and dry-fill capsules. 1210 I.U. per gram.

**5.** *Dry* d-*Alpha Tocopheryl Acetate, Type* 333—Can be incorporated into tablet granulations before or after wet granulating procedures; disperses in water. A gram contains 245 mg. of *d*-alpha tocopheryl acetate, equivalent to 333 I.U. of vitamin E.

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## Hoffmann-La Roche Changes Name of Its Vitamin Division

The vitiamin division of Hoffmann-La Roche, Inc., Nutley, N. J., is now the fine chemicals division.

One of four Roche marketing units, the vitamin division, was established in 1939 to provide pure vitamins to pharmaceutical and food manufacturers. Its slogan, "Vitamins By The Tons," became widely known throughout the food and drug industries. Roche has repeatedly expanded its production of vitamins $B_1$,$B_2$, $B_6$, C, E, biotin and panthenol and has also announced new commercial syntheses for vitamin A and beta carotene.

During the past several years the division added a number of fine chemical specialties so that the new and broader term —fine chemicals division—was selected to describe more accurately its function.

## Monsanto Will Market Micro-Prilled Feed Urea

Monsanto Chemical Company reports it has available through its inorganic chemicals division a new micro-prilled feed-grade urea. Dust-free and non-caking, the material is said to be of extra high quality. It is compatible with feed formulations and will not settle out, the St. Louis, Mo., company says.

Available in 80-pound multiwall polyethylene lined bags, the new urea has been coated to remain free-flowing under all conditions, Monsanto reports. The product is said to be compatible with feed formulations in that it will not "settle out."

## *Bids Wanted*

**Ammonia,** anhydrous, bulk, refrigeration grade, minimum purity 99.95 percent, in accord with Fed. Spec. O-A-455 dated Sept. 14, 1943, and amend. June 8, 1951. Material is compressed at 114.1 PSIG at 70 degrees F. Sub-item 1.1 est. quantity, 46.600 lbs., sub-item 1.2 est. quantity, 41.600 lbs., sub-item 1.3, est. quantity, 36.600 lbs., sub-item 1.4 36.600 lbs., sub-item 1.5 60.000 lbs., sub-item 1.6 31.000 lbs., sub-item 1.7 29.000 lbs., sub-item 1.8 24.000 lbs., sub-item 1.9 21.500 lbs., sub-item 1.10 21.500 lbs., sub-item 19.000 lbs., sub-item 1.12 685.200 lbs., Bid IFB 36-600-60-340, March 4, Directorate, Procurement and Production, Middletown Air Material Area, Olmstead Air Force Base, Pa.

**Drugs,** 199 bots., Thiamine Hydrochloride Tablets, USP, 0.032 gm. ½ gr., 504 bots., Thiamine Hydrochloride Tablets USP, .1 gm 1-½ gr., 2,160 vials, Cyanocobalamine injection USP, 30 MCG per mil; 700 vials, Cyanocobal amin injection USP, 3,960 bots., 200,000 units, Penicillin G Potassium Tablets (buffered), 2,520 bots., Therapeutic Formula Vitamin capsules; 1,152 vials, Hydrocortisone Acetate suspension, sterile, USP 25 mg. per mil; Bid IFB M5-74-60, March 3, Marketing Division for drugs and Chemicals, Veterans Administration, Supply Depot, Somerville, N. J.

**Silica,** amorphous, suitable for use in the formulation of printing inks, 1,000,000 lbs., Bid BEF-108, Schedule No. 17, March 15, Procurement Officer, Bureau of Engraving and Printing, 14th and C Sts., S.W., Washington 25, D.C.

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## Lilly's Biochemical V.P., George Walden, Is Retiring

George B. Walden, vice-president in charge of biochemical manufacturing at Eli Lilly & Co., Indianapolis, Ind., is retiring today. He is a member of the Lilly board of directors.

Mr. Walden played a key role in working out the large-scale production of purified, stable insulin for diabetics. During his Lilly career he was in charge of the production of liver extract for the anemias; and when antibiotics entered the medical horizon, he was responsible for penicillin purification—later, for the entire production. In World War II he directed Lilly's chemical fractionation of blood plasma for the armed forces.

## *US Chemical Savvy*

—*Continued from page 3*

should we sell our chemical know-how and facilities to the Soviets.

Russian interest in our chemical technology, never much of a secret, was pointed up sharply last September when Soviet Premier Nikita S. Khrushchev visited this country.

Mr. Khrushchev let it be known that among the things he most wanted to see here were a few chemical and plastics installations. As it turned out, he didn't get to see any.

But like Mohammed, who was unable to come to the mountain, Mr. K. will now be able to do the next best thing: Bring the US plants to the Soviet Union.

During the last three months of 1959, Mr. Mueller reports, some $30.5 million worth of American goods were licensed for shipment to Eastern European Countries.

Almost two-thirds, or $19.9 million, of the fourth-quarterly licensing value represents approvals for export to the Soviet Union—principally a $17 million textile mill.

Other commodities licensed for the Russians and their satallites include $746,000 worth of isobutyl alcohol for the USSR, $690,000 worth of sulfur for Czechoslovakia and $420,750 worth of styrene monomer for the Soviet Union.

Fourth-quarter applications rejected for the Soviet bloc total $1.4 million. Besides the turndown on petrochemical data, these include fluorinated hydrocarbons, synthetic rubber, helium cryostat, borax and boric acid, polyethylene and molybdenum concentrates.


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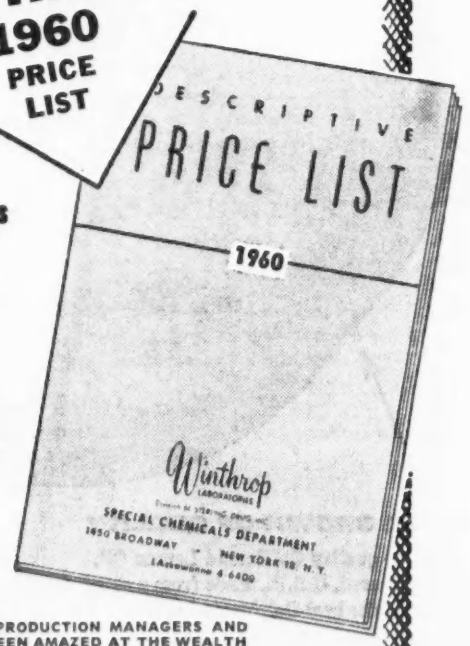


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# Essential Oils, Aromatics

The 50 percent drop in the price of California Exchange brand lemon oil and the corresponding drop in the price of California independent lemon oil accounted for the only news among the essential oils last week. Exchange oil dropped $1.40 per pound and independent oil dropped $1.15 per pound. Lemongrass is reported to be a bit easier than it has been in recent weeks; both Ceylon and Java-type citronella continue to be quite firm, and spearmint continues to be scarce and exceedingly firm.

From the statistical summary of the Agricultural Marketing Service of the United States Department of Agriculture in Washington, DC, we reprint the following figures:

• The orange crop for the 1959-60 season, is estimated at 133 million boxes, larger by 3 percent than a year ago and 12 percent above average. The total is made up of 68.3 million boxes. Early and mid-season oranges and 64 6 million boxes of Valencias. The former is up 3 percent; the latter up 2 percent from last year. About 71 percent of the early and mid-season oranges had been harvested to February 1, compared with 60 percent a year ago.

• The lemon crop is forecast at 18.6 million boxes, which is 7 percent greater than last year and 36 percent above average. Florida's tangerine crop, at 2.9 million boxes, is only about two-thirds as large as either a year ago or average. Harvest on February 1 was about 90 percent finished.

One of the fragrance companies has developed a concentrate for dry blending in the hopper with polyethylene film grade resin. The purpose of the concentrate is to impart a desirable and identifiable odor to the packaging of certain goods. For example, chocolate and spearmint wrappings may be put on candy boxes.

Another fragrance is the smell of oven-fresh cookies. There are orange, lemon, lime, strawberry and raspberry scents. Even the onion aroma will be available fer produce packaging pending Food & Drug Administration approval. Other scents that have been developed are clean linen smell for fresh laundry packages, perfumed paper for packaging women's lingerie and cedar, pine and spruce for men's clothing packages.

## Essential Oils

**Citronella**—The market for both types remains quite high, according to our weekly survey of the essential oil dealers in the metropolitan New York area.

Ceylon material continues to range between 90c. and $1.05 per pound while Java-type continues to range between 85c. and $1.10 per pound.

**Lemon**—As soon as California Exchange brand lemon oil was reduced from $2.90 per pound to $1.50 per pound and $1.40 per pound depending on quality, California independent oil came down from $2.55 to $1.40 per pound. This is the lowest Exchange brand oil has been since July, 1936. And, as recently as 1954, it was selling for as much as $7.25 per pound.

It is interesting to know that California is the only state in the Union in which lemons are grown on a large scale. The two principal types of lemons cultivated there are the Eureka and the Lisbon.

The Eureka, according to reliable historical data, was first planted in California by a Mr. T. A. Garey. He reportedly got the seeds from Silican lemons.

The Lisbon was planted in 1874 or 1875, as a budded tree from Australia.

The seasons of the two lemon trees are quite different, the Eureka bearing fruit in the late spring and summer and the Lisbon bearing fruit in winter and early spring.

Lemons, it seems, prefer a dry climate —much drier than that of Florida and for this reason they have never been successfully grown in the Sunshine state.

Going even further back in history, it is believed that lemons were cultivated in China before the Sung dynasty. Some authorities are of the opinion that the actual beginning of the fruit was in the Eastern Himilayas.

For some reason, according to historians, the lemon was not known to the Romans in spite of their vast empire and their extensive commercial dealings with Asia Minor, Persia and India.

They believe the lemon was introduced to Palestine and Persia at the beginning of the 12th century. Later, it was brought to Northern Africa, Spain, and Sicily, most likely by the crusaders.

Lemons have been growing in California since the padres introduced them at the end of the 18th century, but it has been only recently that the industry has developed on such a large scale.

Among the most important producing areas in the world are Sicily, Calabria, California, Spain, Brazil and Argentina.

Besides its important uses in food and beverages, oil of lemon imparts a refreshing top note to perfumes and cosmetics.

**Lemongrass**—News from source is that the market is a bit easier. Spot prices remain at their previous level, $2 per pound.

### Price Trends

**Advanced**
None

**Reduced**
Lemon, Calif., $1.15 per lb.

**Comparative Price Indexes**
(100=1949 average)

| Last week | Prev. week | Last month | Feb. 27, 1959 |
|---|---|---|---|
| 146.84 | 146.97 | 146.41 | 147.17 |

*For Current Prices See Page 11*

## Seeds and Spices

**Cassia**—Arrivals of Batavia and Korintje material have been moderate and the market is steady at source. Also, the source market for Saigon material is steady although spot demand is weak.

**Cloves**—Zanzibar material is high-priced at source, it was said. There is very little material from Madagascar available.

**Pepper**—Malabar and Lampong black both came down in price, 7c. per pound. Malabar was reduced from 60c. per pound to 53c. per pound whereas Lampong was reduced from 62c. per pound to 55c. per pound.

Muntok white was reduced from $1 per pound to 93c. per pound.

This week's decline is attributed to the pressures to move spot stocks.

The following information is excerpted from a New York trading company's appraisal of the current pepper position of the United States.

In retrospect it was only natural that the heavy arrivals in New York and the recent selling pressure from India should have combined to force a substantial decline from the high reached on January 7th.

The New York selling pressure has been concentrated on afloats by some weak holders, rather than on spots, and the quantities traded at the decline have been small. Detentions by the United States Food and Drug Administration of Malabar because of mold have been heavy recently which is unusual, this being the dry season in India. This could probably have been avoided if precautions had been taken to ship pepper with a lower moisture content, as advocated by the American Spice Trade Association.

Although grinders have bought substantial quantities since the start of the advance, it is not believed that requirements are covered on average beyond May.

Cables from India and the lack of offers in volume appear to indicate that that market is near the bottom and while it is premature to say the same of our market, it would be very unusual for us to go against the trend of primary markets for any length of time, particularly as Singapore is expected to maintain its parity.

At the moment, our stocks would appear to be more than ample, in fact larger than they have been for a decade. By the end of March we will have imported almost half of our yearly requirments of black pepper.

At the moment, we have no competition in obtaining further supplies from India, but as soon as this competition from other consuming countries makes itself felt—and it is sure to come before long—the market is apt to advance substantially. It is anticipated that at that time Singapore holders will compete with India to

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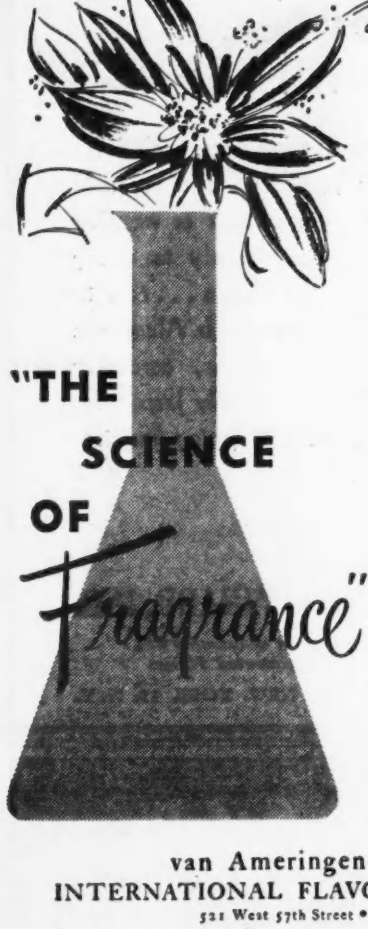

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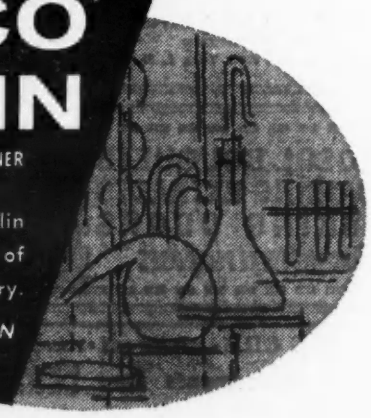

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## Essential Oils

sell their available stocks and thereby maintain an orderly market.

**Sesame Seed**—Strength at source is noted.

**Turmeric**—Prices of Alleppey have settled substantially, it was reported.

**Vanilla Beans**—The following information was compiled by the Vanilla Bean Association of America, Inc.

The vanilla bean is the fruit of an orchid. The vanilla flower is peculiarly shaped and does not reproduce naturally. It has thrived through the centuries because it overcame the risks of sterility either by bird pollinization or through the manual manipulation of the hands of man.

Natives artificially pollinate the plants. Because the vanilla vine is fragile, like other orchids it needs supporting plant props. Care must be exercised so that the luxuriant vegetation does not choke the plantings.

It takes two years to have a vine flower, but five years are required for full production.

When the fruit is harvested there is no odor. The first step in harvesting is to "kill" or wilt the fruit by means of a hot bath to facilitate dehydration.

## ACS Meeting

*—Continued from page 7*

pected to attend the eight-day technical conference.

The 1960 Priestley Medal, highest honor in American chemistry, will be presented to Dr. Wallace R. Brode, science adviser to the US Secretary of State. A leader in chemical research on dyes, optics and photographic processes, Dr. Brode has chosen "International Science," as the topic for the Priestley award address.

The Garvan Medal for distinguished service to chemistry by a woman, the James T. Grady Award for excellence in the reporting of chemical progress, and $1,000 prizes to leaders in twelve fields of chemical research will be presented at the assembly.

Nobel prize-winning biochemist Dr. Severo Ochoa of New York University's School of Medicine has been booked for a symposium on biotin.

## Chemical Expenditures

*—Continued from page 5*

to eighty-seven firms. Last year fifty-eight companies were planning to allocate $464 million for eighty-eight projects in twenty-five states.

In the category of completed (1959) construction, the $1.344 billion total is made up of 379 projects by 205 companies in forty-two states.

In last year's survey a record 498 projects were reported completed at a cost of $1.775 billion by 251 producers in forty-three states.

More money ($686.219 million) is earmarked in this survey for general inorganic chemical plants than for any other category.

General organics—in first place last year—are second with $674.508 million. Here are the other rankings:

Petrochemicals, $454.535 million; plastics and resins, $450.080 million; laboratories, $220.485 million; fertilizer chemicals, $116.427 million; synthetic fibers, $101.300 million; special metals, $85.920 million, and synthetic rubber, $45.150 million.

## Solar Has Plans

*—Continued from page 5*

ing and sales agent. Among twelve major consumers, the fertilizer and chemical industries rank first and second in that order, Solar says.

Sales area covered by Solar products extends west to the Dakotas, north into Canada, down to Tennessee and Kentucky, and as far east as Maine. Headquarters are in Wilmington, Del., home of Atlas Powder.

# Benzene Hexachloride Fights Many Foes

## OPD Special Report on Benzene Hexachloride

*—Continued from page 38*

matic results in control of houseflies and other insects, but has never, somehow, developed into a large-volume item.

Comment on lindane's future from some is that while it's one of the best insecticides, present volume—estimated at less than a million pounds annually—will probably stay about the same in the future. At that, prices were hacked January 30 from $2.40 a pound to $2.13 a pound in 250-pound drums, 5,000-pound lots and more, 100 percent basis, in the hope business volume would be maintained against import competition.

Thus it is that BHC producers hope to regain some of their former glory—by use of the price cut, and by throwing more effort into research and promotion.

"We should have made hay out of the fact that BHC was used last fall in New Jersey to control the encephalitis epidemic—and that it killed mosquito larvae without injuring other wildlife," notes one producer, "but we didn't."

The industry hopes it can cash in on the USDA's massive attack on the boll weevil, which will begin at a new laboratory to be constructed at Mississippi State University.

The department has launched a weevil-eradication campaign and congress has appropriated $1.1 million as a start. BHC producers are hopeful that some of this cash will be used in research favorable to their product.

They're also hoping that recently-increased expenditures for promotion won't be wasted. Of the five makers still in the business, three of them feel it'll be a lucky year if BHC holds its own against what they feel is an inevitable downtrend.

Two of the five producers believe, however, that this year, and certainly in 1961, BHC will stage a substantial recovery in volume. "At this new price, it's head and shoulders below any comparable material," they maintain.

Further, through promotion, they hope to restore other markets to BHC aside from the cotton south—as well as move it into new fields which show promise.

What will the results of the program be? "Next year at this time, we'll know how we stand," is a typical less-than-eloquent industry comment.

### Want a BHC Reprint?

OPD's special "in-depth" report on BHC is being reprinted and will be available soon. These fifteen previous titles are also in print:

"Methylamines Market Posers," "Phthalic Anhydride's Story," Phthalocyanine Pigments," "Sodium Sulfate Outlook," "Optical Brighteners," "Acetone's Output Rise," "Maleic Anhydride Expansion," "Lysine Monohydrochloride," "DDT Market's Big Poser," "Ultra-violet Absorbers," "DOP, DIOP Volume Rises," "Butadiene Convalesces, "Styrene Monomer's Story," "Chelating Agents" and "Titanium Pigment.

Reprints of the sixteen articles may be obtained at 35 cents per article (discounts on quantities of a hundred) from OIL, PAINT AND DRUG REPORTER'S Reprint Department, 30 Church Street, New York 7.


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# Trade Name Chemicals & Specialties

The problem of insoluble residues often occurs in fuel oils for many reasons, such as long periods of storage. This problem of sludge has been minimized in many ways with the most recent procedure found to be the most effective and economical. This entails the use of additives, of which there are two types in use. These are: inhibitors, which reduce the formation of residue; and dispersants which decrease sludge particle size and improve filterability. There are no universal additives and thus tests must be made to evaluate the proficiency of the different inhibitors These include: the ultra violet radiation screening test; the duPont thirteen week, 110°F. accelerated storage test; the twelve month ambient storage test; and the Socony Mobil method 530-57.

A number of methods have been developed through the centuries to increase the whitenes of fibrous materials. The most effective and widely used one is chemical bleaching which is the removal of impurities by chemical change, such as by oxidation with hypochlorite or hydrogen peroxide. Other methods have been physical removal, for example by degumming; compensating the yellowish cast of a material by blue pigments or dyestuffs; or covering a surface with pigments or finishes.

***WHAT'S REPORTED ON HERE***

Though coverage in the Trade Name Chemicals & Specialties market report encompasses twenty classes of chemicals, only a few of them are mentioned in this issue. Here's the entire list:

Adhesives, antibacterials and fungicides, antifoaming agents, antioxidants, antistatic agents, blowing agents, catalysts and accelerators, chelating agents, chemically processed oils, emulsions and latexes, enzymes, fatty acid derivatives, feed supplements, filtering materials, ion exchange resins, surfactants, synthetic waxes, textile chemicals, thickening and suspending agents, and ultraviolet absorbers.

If you have suggestions for any additional materials that might be included in this section, write OIL, PAINT AND DRUG REPORTER'S Technical Editor, 30 Church street, New York 7.

## Antifoaming Agents

Nopco Chemical Company has on the market a new textile mill defoaming agent brand named **"Nopco KF-99."** This white opaque liquid is said to have a pH of 6.5 in a 2 percent emulsion, a pH stability range of 3 to 10, and to be readily dispersible in water.

As a low cost defoamer Nopco uses **"Nopco KF-99"** in such textile applications as: pad dyeing, jig dyeing, package dyeing, bleaching, boiling off, scouring, warp sizing, latex emulsions, resin emulsions, or printing pastes.

W. H. Fales Company produces **"No-Fo,"** which is a defoamer designed for use in all types of emulsion paints and described as being "safe, effective and economical."

Concerning effectiveness of **"No-Fo,"** Fales claims that two pounds per hundred gallons of paint is usually sufficient to do the job. With regard to safety of the product, the company says that it is safe to use, it will not cause film separation.

Stability features of **"No-Fo"** includes its needing no stirring and the fact that it will not separate. Finally, Fales states that **"No-Fo"** may be used in every type of latex or emulsion paint, and may be added at any stage of the manufacturing process without losing its effectiveness.

The price schedule put out by Fales has **"No-Fo"** listed at 19½c. per pound for 55 gallon drums, 21½c. for 30 gallon drums, and 26c. per pound for 5 gallon cans.

## Antioxidants

Armour Industrial Chemical Company, a division of Armour & Company, produces the **"Armolads,"** which are a series of fatty amine derivatives ranging in physical form from a cloudy, pasty, solid to a clear liquid at ambient room temperatures. Armour has designed these products for use as fuel oil additives in a variety of crude stocks including Venezuelan, Mid-East, Mid-Continent, West Texas and others.

The main function of Armour's **"Armolads"** is to stabilize effectively the oil against insoluble gum formation, color degradation and to improve filterablity. And all of this can be done, states the company, for as little as 0.8c. per barrel or less.

Soluble in fuel oil and many other polar and non-polar solvents, the **"Armolads"** are said to function as additives without promoting serious emulsion problems in the fuel oil. A typical fuel oil sludge as described by Armour is a mayonnaise-like emulsion composed of such things as 50 percent water, 40 percent fuel, 3 percent inorganic contaminants, and 2 percent organic sediments.

Armour goes on to explain that the organic sediment formed in the fuel oil during storage oxidative and polymerization processes acts as a stabilizer for sludge. Other components like water, fuel oil and rust are always present in the storage facilities to some degree. The company continues by stressing the point that a small amount of organic sediment has the potential of forming large volumes of sludge in the system.

**"Armolad"** inhibitors are meant to function in such a way as to disrupt the normal chain reaction of oxidation and polymerization, and thus minimize or arrest the formation of organic complex decomposition products.

Armour makes availabe five types of fuel oil inhibitor additives, among which certain ones are effective in a variety of crude stocks while others are specifically advantageous in only one or two stocks, and many actually accelerate gum formation in some stocks. Finally, Armour claims that for improved physical characteristics, the **"Armolads"** are often times blended with either isopropanol, toluene, or methanol or combinations thereof.

## Optical Brighteners

Hilton-Davis Chemical Company has on the market an optical brightener which is a derivative of diaminostilbenesulfonic acid. **"Hiltamine Arctic White BPS."** It is said to be used in all forms of detergents to whiten cotton, silk, acetate, and other fibers derived from cellulose or viscose.

Effective under a wide range of acidity and alkalinity, Hilton-Davis claims that best results are obtained from **"Hiltamine Arctic White BPS"** when applied at a pH of 9.0 or higher. Also, described as being stable to prolonged periods of storage and to high incorporation temperatures, it does not deteriorate in the presence of alkaline detergents.

**"Hiltamine Arctic White BPS"** is said to give best performance when used at concentrations of from 0.01 to 0.10 percent, depending upon the weight of the soap or detergent. The company advises that solutions of **"Hiltamine Arctic White BPS"** be protected from the light, but powder form need not be. When applied to a fabric, it fades on exposure to sunlight and loses some of its fluorescence in the presence of chlorine bleach.

**"Hiltamine Arctic White N"** is another Hilton-Davis optical brightener said to be a derivative of coumarin and to provide whitening on fabrics such as wool, nylon, orlon, acetate, etc. Capable to being applied from either acid or alkaline solutions, Hilton-Davis says that this brightener is stable to storage and does not deteriorate in a detergent.

Concerning application, **Hiltamine Arctic White N"** is suggested for incorporation at levels of from 0.01 to 0.05 percent in products such as nonionic detergents. Non-toxic, it should, however, be protected from exposure to the light.

Verona Dyestuffs, a division of Verona-Pharma Chemical Corporation, has on the market **"Phorwite BE Extra Highly Conc."** Said to have a pronounced brightening effect in a neutral cast, Verona claims that their product saves operational time and insures a uniform white tone in the bleached goods.

**"Phorwite BE"** is described by the company as being a yellowish white powder which should be stored in a dark place. Its solubility is about 10 percent in boiling water, even of average hardness. Being sensitive to light, Verona advises that solutions of the powder not be prepared until just before use.

The pH of **"Phorwite BE"** varies with

—*Continued on page 55*

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# Coatings Materials

The Argentine casein market remained unusually quiet this week, extending its string of unchanging conditions to four straight weeks. Importers fears were aroused this week as reports of a dock strike in Argentina reached here. But shipments continue uninterrupted as the strike was settled almost as quickly as it had begun. The bearish tendencies threatening the Argentine market apparently is growing stronger as dealers report few purchases and mounting pressures toward lower prices. Polish casein is still being offered at 19 cents to 19¼ cents a pound while New Zealand held steady at 24 cents a pound. Reports concerning Australian casein show a further reduction in the output of material. Estimates of production for 1960 are for 8,500 tons, a sharp decline from the 11,000 tons produced in 1959.

In the prime pigments, the general market tone is routine. Activity in the last few weeks has largely been a result of consumers rushing to beat previously announced price advances. Producers of channel black and the cadmium colors did brisk trading as orders were placed to beat the deadlines for the new price schedules. Zinc oxide sources look for the usual seasonal pick up in demand as the paint trade begins grinding operations for Spring orders. Demand from the rubber industry for zinc oxide has been well sustained, with every indication of maintaining it for the future. One leading producer of gums announced late last week that effective February 29, the price for various grades of Dammar and Congo Copal gums would be an average of ¾ cent to 1 cent higher. Industrial business for gum demand is well sustained.

The Calcutta market was firm last week with prices unchanged. Trade sales show an upward trend, while industrial business is reported to be only fair.

## Price Trends

**Advanced**
Gums, Dammar, Congo Copal, ¾c. to 1c. per lb.

**Reduced**
None

**Comparative Price Indexes**
(100=1949 average)

| Last week | Prev. week | Last month | Feb. 27, 1959 |
|---|---|---|---|
| 103.07 | 103.06 | 103.03 | 103.10 |

*For Current Prices See Page* 11

## Prime Pigments

**Aluminum Pigments**—According to a report by the Bureau of Mines, on shipments and receipts of aluminum ingot and mill products during December, gross and net shipments of atomized material came to 970,000 pounds. Net shipments during the previous month were listed at 900,000 pounds and for November, 1958, the total was 545,000 pounds.

With five companies reporting, net shipments to flaked material amounted to 453,000 pounds in December, 332,000 pounds in November and 279,000 pounds in November, 1958. Gross shipments of aluminum paste were tallied at 1,183,000 pounds during December. Net shipments for the same month came to 1,183,000 pounds, while the previous months' figures amounted to 1,072,000 pounds. In December, 1958, total net shipments came to 982,000 pounds.

**Cadmium Colors**—Market is reported to be firm this week. After the burst of activity a few weeks ago, preceding the recent price advance, the market slowed to its normal routine. Supplies are considered ample, prices firm.

**Carbon Black**—Business in channel black hit a fast pace as consumers rushed to place order to beat the price increase that went into effect February 1. Although production of channel black in January declined slightly to 25,590,000 pounds from the over 27 million pounds in December, January shipments jumped 10 million pounds over the 30 million pounds in December. Stocks at the end of January dropped to 52,076,000 pounds from the 67,242,000 pounds on hand at the end of December.

**Lead Pigments**—Producers report general market conditions unchanged. Sales are off from peak levels but hold at good levels. No changes are anticipated for the next few weeks.

**Zinc Oxides**—As the paint producers begin grinding operations for Spring-dated orders, zinc oxide producers anticipate an increase in demand. The grinding operations usually start up, around this month or the early part of March. Since much of the zinc oxide used by the paint trade ends up in exterior house paints, both paint and zinc oxide producers depend on the homeowners Spring painting as a considerable source for their material.

While some instances of softening in the market are reported, demand from the rubber industry is well sustained. Zinc oxide finds many uses in such rubber products as tires and in the manufacturing of foam rubber.

Trade sources feel that general market conditions are routine with prices holding well, and no change in price listings scheduled at this time. Exports of zinc oxide totaled 622,000 pounds, while imports amounted to 2,127,005 pounds. The two largest suppliers of zinc oxide were the United Kingdom with 1,484,100 pounds and the Netherlands with 565,000 pounds. Mexico was third with 322,000 pounds.

## Synthetic Resins

The following figures show production in pounds for November and list October figures for comparison, as reported by the Tariff Commission:

**Production**

| | October* | November** |
|---|---|---|
| Phenolic and other tar acid resins: | | |
| Molding resins | 20,302,289 | 19,865,207 |
| Laminating resins | 6,633,897 | 5,872,666 |
| Protective coating resins, modified, unmodified, except by rosin | 2,421,561 | 2,140,909 |
| Urea and melamine resins: | | |
| Protective coating resins, straight modified | 3,427,563 | 2,799,046 |
| Styrene resins: | | |
| Protective coating resins, straight modified | 6,950,206 | 6,502,078 |
| Vinyl resins: | | |
| Total all types | 105,652,560 | 100,469,890 |
| Alkyd resins for protective coatings: | | |
| Phthalic anhydride types, unmodified | 25,657,177 | 18,123,895 |
| Modified with tar acids, rosin and/or other material except styrene | 6,112,089 | 4,605,690 |
| Polybasic acid types except phthalic: | | |
| Unmodified | 792,901 | 545,041 |
| Modified with tar acids, rosin and/or other material except styrene | 571,632 | 451,150 |
| Rosin modification for protective coatings: | | |
| Rosin, rosin esters, unmodified (ester gums, esterified with glycerol) | 1,140,591 | 744,797 |
| Esterified with other alcohols, pentaerythritol, glycols, etc. | 1,001,978 | 950,805 |
| Modifications with phenolic and other tar acid resins | 2,141,643 | 1,997,244 |
| Modifications with maleic and fumaric acids | 3,480,137 | 3,379,920 |
| All other modifications | 5,133,699 | 5,288,737 |
| Coumarine-indene and petroleum polymer resins | 23,915,787 | 18,986,515 |
| Material including silicone resins | 20,305,076 | 20,412,903 |

* Revised.
** Partly estimated.

## Lacquer Materials

**Cellulose Acetate/Butyrate**—Demand is fairly good this week. Supplies are reported to be adequate for all needs. Prices are firm and unchanged.

**Nitrocellulose**—Active trading keynoted the market this week. Activity has been on the rise since the end of the steel strike, and the trade anticipates sustained demand from the furniture industry for the remainder of the year.

**Plasticizers**—The supply position of phthalic anhydride continued to improve. Accompanying this favorable report, producers feel that a balance in supply and demand will be reached soon. While trading is light, the outlook is for a steadily rising demand. A price advance of 2c. per pound is scheduled to take place on April 1, for phthalic anhydrides, according to at least two leading producers.

## Natural Resins

**Gums** — One leading producer announced late last week that effective today, February 29, the price for various grades of Dammar gums and Congo Copal gum would be an average of ¾c.-to-1c. higher.

# Coatings Materials

The new prices for the grades affected are: for Congo Copal No. 3, bgs., 17c.-to-20c. a pound; Dammar gum Batavia, East India, Batu bold, 15c.-to-17c. a pound; nubs and chips, 9c.-to-10c. a pound; black, bold, 15c.-to-17c. a pound; pale, chips, 15c.-to-17c. a pound. The new listing for Singapore, No. 1 is 34c.-to-40c. a pound, while No. 3, dust is 18c.-to-20c. a pound. Prices for the other grades remain unchanged.

Trade sources report that while general conditions were spotty for the last quarter, the outlook for the next six months is for an increase in demand. Industrial business is well sustained and should continue well into the third quarter.

**Shellac**—The Calcutta market was firm last week with prices unchanged. Sales here are reported to be steady. The orange, lemon No. 1 held in the 37c.-to-39c. a pound range while lemon No. 2 was unchanged at 34c.-to-37c. a pound. Superfine was firm at 32c.-to-34c. a pound. Listings for other grades are the same as in previous weeks.

## Fillers & Inerts

**Asbestos**—Shipments of raw material is expected to be fairly normal for this time of the year. Trade sources expect an increase in fiber demand during 1960 of about 8 to 10 percent. Presently, the asbestos market is very slow with stiff competition for the little business that does exist.

## Naval Stores

**Pine Gum**—Gum naval stores production during the first ten months of the crop year was 11 percent less than for the same period last season, according to the Crop Reporting Board. January production, primarily from stored gum, was reported at 3,440 barrels of turpentine and 13,970 drums of rosin. Compared with the same months last year, production to date this season was about the same for steam distilled turpentine and rosin, while sulphate turpentine was up 13 percent, and tall oil rosin up 27 percent. Gum turpentine stocks of 20,070 barrels a month ago were down to 16,680 barrels at the end of January. All CCC gum rosin stocks were sold by January 31, 1960. Gum rosin stocks in the "other" category, which has reflected purchases of CCC stocks, have also been dropping sharply — indicating rapid out shipments of former CCC stocks. Wood rosin stocks also decreased from a month ago.

For the week ended February 13, the average price per standard barrel of commercial crude pine gum was reported at $30.40 as compared with the $30 previous week and $23.20 a year ago. The volume of gum deliveries to plants totaled 950, as against 1,050 the previous week and 655 a year ago. Content per barrel included an average 7.29 gallons of turpentine and 296.4 pounds of rosin. Gum percentages ranged as follows; N, 62; M, 30; K and below, 8.

**Rosin, Gum**

(USDA, per 100 lbs.)

| | Fri. Feb. 19 | Mon. Feb. 22 | Tues. Feb. 23 | Wed. Feb. 24 | Thurs. Feb. 25 |
|---|---|---|---|---|---|
| Drums— | | | | | |
| M | ... | ... | $12.35 | ... | $12.00 |
| WG | ... | ... | 12.95 | ... | |
| WW | ... | ... | 13.25 | ... | 13.25 |
| Bags— | | | | | |
| Tankcars (for week ended Feb. 26)— | | | | | |
| M or better, $11.50; K or better, $11.50 | | | | | |
| Sales, USDA | | | | | |
| | 414* | .... | 301 | 21 | 478* |

New York

(Per 100 lbs., c.l., Friday)

WW, $14.00; WG, $13.70; N, $13.40; K-M, $13.20

**Turpentine, Gum**

(USDA, per gal., 7.2 lbs.)

| | | | | |
|---|---|---|---|---|
| Price | ... ... ... | .52¼ | .52 7/10-.52¾ | 52 9/10 |
| Sales | .... ... ... | 4,000* | 12,000* | 6,000* |

* Drums equivalent. ‡ Gallons. ‡ Carlots.

## Miscellaneous

**Casein** — The abnormal quietness that has set in on the Argentine market continues for the fourth straight week. Sources detect strong bearish tendencies. And with purchases few, combined with the general dullness of the market, many sources consider lower prices a possibility. The dock strike that was reported earlier this week in Argentina has been settled.

The downward trend in production of Australian casein became of interest to producers this week as estimates of this years output was set at 8,500 tons. This is a marked decrease from the 11,000 tons turned out in 1959 and shows a further decline when compared to the 14,000 tons produced in 1958. The reason given for the reduction in production was switching to other dairy products by the Australian producers.

The New Zealand market continues unchanged. Supplies are adequate, demand was steady and trading normal. Prices are: Argentine, 18¾c. per pound; New Zealand, 24c. per pound; while Polish is reported to be in the range of 19-to-19¼c. per pound.

## Fatty Acid Output Soared 18.8 Percent in Past Year

Fatty acid output soared to 489.6 million pounds in 1959, up 18.8 percent from 1958's 412.2 million pounds reports the Fatty Acid Producers' Council.

Output of saturated acids totaled 257.3 million pounds, up from 214.4 million the year before. Unsaturated acid production, including tall oil derivatives as reported under the council's category No. 12, rose to 232.3 million pounds, up from 197.8 million in '58.

The council reports total disposition of saturated and unsaturated types at 496.9 million pounds, up 17.4 percent from 423.1 million in 1958.

Disposition of saturated acid was tabbed at 266.2 million pounds as against 218.4 million in 1958. Unsaturated fatty acid disposition was 230.7 million pounds, compared with 204.7 million the year before.

## *Monsanto Sees Afar*

—Continued from page 4

comers. Petroleum makers, particularly, it is noted, have been crowding the portals of an already competitive market. Cosden Petroleum Corporation, now a subsidiary of W. R. Grace & Co., recently announced a 40 million pound monomer expansion. Soon to be constructed is a 70 million pound joint facility for Sinclair Oil Corporation and Koppers Company at Houston, Texas.

Monsanto itself set a precedent for this gambit with announcement last September of a 5½ cents price cut for maleic anhydride and a 4¼ cent cut for fumaric acid, effective January 1. Just at that time, these sources note, the air was filled with talk about new capacity and new competitors entering the field.

When it comes, the styrene cut will bring the base price down to 11.2 cents a pound. Current escalation factors will continue in effect, Monsanto says.

## *Flemming Against Additives*

—Continued from page 3

that once the cancer process is started, it is irrreversible.

"Health risks should not be taken in the interest of economic benefits," he declared.

The secretary went on to say that he would still like the Delaney cancer clause to be taken out of both the food and color additives measures.

If a potential cancer-producer leaves no residue in a food product, he said, HEW should have the authority to permit use of the additive.

Right now, any carcinogenic additive must be prohibited automatically by the department. Such a ban is now in effect on diethylstilbestrol.

## *Tenn. Eastman*

—Continued from page 7

produced by the Texas Eastman division in Longview, Tex., were substantially higher than in '58, the company reports.

First offered late in 1957, medium density polyethylene made the major contribution to this gain. Strong advances were also reported for the division's industrial chemicals, especially ethyl alcohol and 2-ethyl hexanol, used in the manufacture of vinyl plasticizers.

# Trade Name Chemicals

—Continued from page 53

the material to be treated. When brightening cellulose and regenerated cellulose, the pH range is 4 to 11; when treating nylon materials the optimum pH is about 4.5.

Verona goes on to say that "hard water and contents of electrolytes in the liquor work in favor of the affinity of **"Phorwite BE"** and also having some effect is the processing temperature. Concerning this point, **"Phorwite BE"** is said to react to temperatures like a cold dyer.

Fastness to chlorine is another feature listed for **"Phorwite BE."** However, Verona reports that their product does not have enough resistance to be applied directly to chlorine and chlorite bleaching baths.

With regard to methods of application, Verona explains that the amount of **"Phorwite BE"** needed is first dissolved in a sufficient amount of hot water. The solution is then added to the liquor and the goods are treated for 20 to 30 minutes. Most marked effects, continues the company, are achieved at room temperatures.


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# Oils, Fats and Waxes

Consuming demand for oils and fats continued restricted to actual needs last week. Crude coconut oil rallied, closing steady at the fractional decline on the Pacific coast, while New York remained unchanged. Interest in soybean and cottonseed oils lagged, the market continued unsteady, reflecting the easiness of soybean oil futures. Business in both oils were reported slow. Corn oil was stronger and light sales were noted at an increase of ⅛ cent per pound. Peanut oil continued in tight supply and was unchanged, but firm. Cash lard was easy and fractionally lower.

Firmer tone developed in tallow and greases, because of improved trading for domestic and export, which took place at an increase of ⅛ cent per pound. Offers dried up and sellers were generally holding for an additional ⅛ cent.

Further weakness in flaxseed was reflected in linseed oil. Crushers reduced price schedule ½ cent per pound. Demand was limited to fill-in needs, with deliveries against contracts in moderate request. Lower cost of oiticica oil futures continued to overhang the market and nearby delivery was easier, declining about ½ cent per pound. Tung oil continued in a steady position and moderate trading was reported at unchanged prices. Palm oil was lower on spot, because of the cheaper cost of replacements from primary sources. Cod oil was firmer and in good demand for shipment. Offers for shipment were light and slightly higher.

Trend of the linseed meal market was lower and prices dropped $3 per ton. Soybean meal was easier and off 50 cents per ton. Cottonseed meal was steadier with lower oil, advancing $1 per ton.

## Price Trends

**Advanced**

Corn oil, crude, ¼c. per lb.
Refd., ¼c. per lb.
Cottonseed meal, $1 per ton.
Greases, ¼c. per lb.
Tallow, inedible, ¼c. per lb.

**Reduced**

Cocoa butter, 1c. per lb.
Coconut oil, Pac. coast, ¼c. per lb.
Copra, $5 per ton.
Cottonseed oil, crude, ¼c. per lb.
Refd., ¼c. per lb.
Lard, cash, 1/5c. per lb.
Linseed meal, $3 per ton.
Linseed oil, acid, ¼c. per lb.
Linseed oil, ½c. per lb.
Oiticica oil, ¼c. per lb.
Palm oil, 3/10c. per lb.
Soybean meal, 50c. per ton.
Soybean oil, crude, 1/10c. per lb.
Refd., 1/10c. per lb.

**Comparative Price Indexes**

(100=1949 average)

| Last week | Prev. week | Last month | Feb. 27, 1959 |
|---|---|---|---|
| 117.64 | 117.96 | 122.02 | 112.90 |

*For Current Prices See Page 11*

## Vegetable Waxes

**Castor**—While trading was spotty, the market was unchanged and steady. No. 1 Brazilian was held at 18c. per pound, tankcars, New York, prompt delivery and No. 3 at ½c. less. Domestic oil was quiet and unchanged.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

| | Pounds | |
|---|---|---|
| | Castor Beans | Castor Oil |
| Last week | ..... | 1,628,000 |
| Previous week | ..... | 1,684,000 |
| Corresponding week, 1959 | ..... | 630,060 |
| Total this year | 799,950 | 15,124,000 |
| Corresponding period, 1959 | 6,217,300 | 14,302,000 |

**Coconut**—Crude oil for shipment was lower at 17½c. per pound, tankcars, f.o.b. Pacific coast, prompt shipment. The New York market was unchanged 19¼c., tankcars, February-March delivery. Oil in bulk was steadier at 18½c. per pound, c.i.f. New York for March arrival following sales at ¼c. less. Resale government oil was offered at 19c., tankcars delivered, New York area.

**Corn**—Market was firmer, up ⅛c. Light sales of crude were reported at 13⅛c. per pound, tankcars, f.o.b. mills. Refined was higher at 16.85c. tankcars, New York basis.

**Cottonseed**—Futures continued to drift lower on the New York Produce Exchange last week due chiefly to weakness in soybean oil futures which again reached new seasonal lows for all positions. March and May cottonseed futures scored new lows for the current move, while later months were only slightly lower. Light March tenders which were finally stopped, but not before increasing liquidation in that month. Total tenders amounted to 8 contracts. Trade interests absorbed March offerings while commission houses did the reverse.

Cash oil was quiet and lower. Refined salad oil declined to 12¼c. per pound, tankcars, New York for prompt delivery.

Crude oil was unsteady and off ⅛c. Light sales were reported at 9⅛c., tankcars, in the Valley. Market in the southeast was nominal at 9¼c. to 9⅜c.; Lubbock at 9c. and Waco, 9c.

**Linseed**—Further weakness in flaxseed was reflected in oil. Prices were dropped ½c. per pound. Demand was still confined to fill-in requirements. Raw oil was lower at 13½c. per pound, tankcars, Minneapolis, February-May delivery; 13.7c., June-August and 14.61c., f.o.b. New York, prompt delivery.

**Oiticica**—Oil for nearby delivery was easy reflecting cheaper offers for forward positions. Tankcars were quoted from 18c. to 18⅛c. per pound, New York, spot, with occasional sales at this level. April forward continued nominal around, 17¾c., same basis.

**Palm**—Lower primary markets created an easier tone and spot stocks were reduced fractionally. Drums were cut to 14½c. to 15½c. per pound, spot, as to quantity and tankcars to 11.65c., prompt delivery.

**Peanut**—Trading in crude was moderate on the basis of 15½c. per pound, tankcars, f.o.b. mills, southeast. Refined oil was quiet and unchanged at 18¾c., tankcars, New York basis.

**Soybean**—Buying interest lagged, the market reflecting the weakness of futures. Crude was nominal at 7½c. per pound, tankcars, Decatur, prompt delivery. Refined salad was inactive and offered at 9.45c. tankcars, New York basis.

**Tung**—Firm tone prevailed with fair trading noted at 21½c. per pound, tankcars, New York, prompt delivery. Drums were maintained at 23½c. to 24c. per pound, spot, depending upon quantity.

## Miscellaneous

**Cocoa Butter**—Market was easier and off 1c. Spot stocks ranged from 58c. to 63c. per pound, according to quantity.

**Copra**—Shipments were easier, declining $5 per ton. March arrival was quoted at $237.50 per ton, c.i.f. Pacific coast.

**Flaxseed**—Bids toppled additional 20c. a bushel in continuation of recent downtrend and market lacked broad support even at the lower level. Bids were at $3.05 a bushel, spot and to-arrive, basis Minneapolis. Only moderate amounts were traded ahead of the decline and offerings dwindled at the lower price. U.S.D.A. report indicated only 409,569 bushels of flaxseed under loan January 31, compared with 13.2 million a year ago.

## Fats and Greases

**Greases**—This market was firmer under increased demand. Prices were lifted ⅛c. to ¼c. depending upon seller. Choice white ranged from 6⅜c. to 6½c. per pound, tankcars, delivered and yellow, 5⅛c. to 5¼c., same basis.

**Lard**—This market was easy and fractionally lower. Cash lard declined to 8.30c. per pound, drums, Chicago.

**Tallow**—Improved demand stiffened the market and prices were lifted from ⅛c.

—*Continued on page 58*

### *Cottonseed Oil Futures*

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, February 26, follow:

| | Sales | High | Low | Close |
|---|---|---|---|---|
| | | Cents per Pound | | |
| March | 255 | 11.20 | 11.09 | 11.10@11.11 |
| May | 211 | 11.38 | 11.25 | 11.25@11.27 |
| July | 283 | 11.48 | 11.36 | 11.36S |
| Sept. | 93 | 11.39 | 11.29 | 11.30@11.32 |
| Oct. | 77 | 11.25 | 11.15 | 11.16S |
| Dec. | 44 | 11.23 | 11.16 | 11.15@11.18 |
| May (1961) | 2 | 11.30 | 11.30 | 11.27 Bid |

Total sales and switches, 935 contracts.

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# Oils, Fats and Waxes

*—Continued from page 56*

to 1¼c., as to seller. Offerings were sharply curtailed and closely held. Export inquiry also was more active. Bleachable fancy was quoted at 5¾c. per pound, tankcars, delivered; prime, 5⅝c.; special, 5¼c. and No. 1, 5⅛c., same basis. Increased export interest caused guaranteed fancy to advance to 7½c. per pound, drums f.a.s. and to 6½c., bulk, f.o.b.

## Cake and Meal

**Cottonseed Meal**—Trading was slow. Supplies are not heavy, and advanced $1 because of lower oil market. Meal, 41 percent was quoted at $58 per ton, sacked, Memphis and Alabama and $54, Georgia-Alabama area.

**Linseed Meal**—Poor demand and pressure of distress lots brought further weakness to this market, prices dropping $3 a ton, some track offering moved at additional $1 to $2 discounts. Modest improvement was noted in shipping directions, especially among smaller mixers. Extracted meal, 34 percent protein, was quoted at $58 a ton, bulk, in carlots, f.o.b., Minneapolis prompt, delivery. Old process expeller meal, 32 percent was $2 lower at $70.50, Minneapolis, some trades $1 less.

**Soybean Meal**—Price movements were extremely narrow in the market, averaging steady to $1 lower. Cutback in production, estimated at 20 percent, was principal stabilizing factor. Demand from large formula feed manufacturers continued extremely dull but moderate pickup was noted among smaller mixers, in fact scattered sales for deferred delivery were at $2 to $3.50 premium over spot. Meal, 44 percent protein, was quoted at $56 a ton, unrestricted, bulk, Decatur, for prompt shipment.

## Waxes, Vegetable

Buying interest in vegetable waxes lacked snap last week as consumers continued to limit purchases to actual needs. The little of new interest emanating from Mexico regarding the scarcity of available stocks of candelilla wax. Because of the low production there, contracts for several hundred tons of crude have recently been cancelled for shipment to the US. This has caused a dearth of stocks on spot and the market has continued on a nominal basis. Users of candelilla are being compelled to switch to substitutes.

While trading in carnauba grades was limited on spot, prices of all grades remained steady at unchanged quotations. Offers from Brazil were quite liberal, but buyers continued to show little interest in shipments.

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FILTERS—Vallez type 49 with 41 Stainless covered leaves ±2 Sweetland 12 Stainless covered leaves. Ertel 6" & 10" Disc type.
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KETTLES—Stainless Jack. 20 to 500 gals. Dopp 350 gal. Cast Iron Jack Vacuum. Devine Impreg. Units 30" & 36" dia. Steel. Alum & Copper 5 to 2,000 gals.
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MIXERS—Baker Perkins 100 gal. Jack. Day Imperial 75 & 150 gal. Change Can Mixers 8, 15 & 40. Day Jumbo 700 gal. horiz. Mixer. Blystone 3000± horiz. spiral Mixer Day 1000± horiz. Dry ribbon Mixer. Dry Spiral Mixers 50 to 3000±. Lancaster 6' dia 25 HP & ±1, 3 HP.
PUMPS—Vacuum 10 to 500 CFM. Gould 75 HP Centrifugal 250 PSI.
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2—Baker Perkins #15, 100 gal. sigma blade mixers, jktd., 25 HP.

6—Baker Perkins #17, 200 gal. dbl. arm jktd. mixers.

2—96" dia. Vulcan T316 SS bubble cap columns, 30 trays on 12" centers, 272 caps per tray.

2—Graver 750 gal. T304 SS Kettles, ASME, 10 HP XP

17—Sharples #AS-16-V Super centrifugals, Inconel bowls & covers, 3 HP TEFC motors.

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## REACTORS — EVAPS — CONDS — TANKS

1—Condenser Service 650 gal. 304 S.S. closed Kettle, 5' x 4', with 100 sq. ft. bayonet heater.
1—1400 gal. Blaw-Knox, steel, jacketed, agitated Reactor.
2—2000 gal. Struthers Wells 316 S.S. jacketed, agtd. Reactors.
2—3200 gal. 304 S.S., jacketed, agitated Kettles.
1—550 sq. ft. Buflovak, monel single effect Evaporator.
1—7500 gal. 316 S.S. Vert. Storage Tank, 7' x 25', 50 psi.
1—750 gal. nickel clad Mixing Tank, 125# nickel coils.
1—4000 gal. Haveg Vert. Tank 8' x 12'.
1—1500 gal. Stainless Pressure Tank, 5' x 10', 90#.
1—12,000 gal. horiz. steel Pressure Tank, 7'6" x 36', 200 psi.
6—Stainless Heat Exchangers: 1220, 786, 536, 370, 315, 250 sq. ft.
1—24" dia. x 35', 304 S.S. Bubble Cap Column.
1—30" dia. x 20', 304 S.S. Bubble Cap Column.

## CENTRIFUGES

2—Baker Perkins 36 HS TerMeer S.S. continuous.
1—Sharples C-27 Super-D-Hydrator, 316 S.S.
1—Bird 18" x 28", 316 S.S. Solid Bowl, Continuous.
1—Bird 18" x 28", steel, Solid Bowl, NEW, Continuous.
1—Bird 36" x 50", 347 S.S. Solid Bowl, Continuous.
2—Sharples PY14, PN14, Super-D-Canters, 316 S.S.
1—Tolhurst 32" Suspended, 316 S.S., imperforate basket.
2—AT&M 48" Suspended, 316 S.S. basket.
2—Sharples #16, 304 S.S., 3 HP motor.

## MIXERS

1—#12 Sturtevant 304 S.S. Rotary Mixer, 450 cu. ft.
1—Baker Perkins #16TRM, 150 gal. jktd., Vac. 60 HP.
5—Day "Cincinnatus" double arm, 250 and 100 gal.
1—1500# Powder Mixer, 7½ HP XP motor.
2—Steel, jktd. Powder Mixers, 225 and 350 cu. ft.
1—36" Simpson Intensive Mixer.

## DRYERS

3—Buflovak Vacuum Shelf, 20—60" x 80" shelves.
1—Devine Vacuum Shelf with 19—59" x 78" shelves.
1—Devine Vacuum Shelf with 10—40" x 43" shelves.
2—Buflovak 42" x 120", atmospheric, double drum.
2—Devine 4' x 9', single drum, atmospheric.
1—Baker Perkins 5'6" x 6' Rotary Vacuum Dryer.
1—Louisville 6' x 45' S.S. Rotary Steam Tube Dryer.
1—Louisville 54" x 35', Monel Rotary Steam Tube Dryer.
2—Louisville Rotary Steam Tube 6' x 25', 6' x 50'.
9—Rotary Dryers, 34" x 30', 4' x 40', 6' x 50', 6' x 60', 7' x 80', 8' x 87'.
2—Louisville 8' x 50' Stainless Steel lined Rotary Dryers.
1—Traylor 30" x 18' Stainless Steel Rotary Dryer.
2—Link Belt, 7'5" x 25", 6'4" x 24', S.S. Louvre Dryers.

## FILTERS

1—Oliver 6' dia. Horizontal Filter, 316 S.S.
1—Oliver 3' x 6' Steel Rotary Vac. Precoat Filter.
1—Niagara #370-38 Filter, 370 sq. ft., 304 S.S.
2—#49 Vallez Rotating Pressure Filters, 738 sq. ft.
1—Oliver 5'3" x 8' Steel Rotary Vacuum, vaporite housing.
1—Sparkler 33S28 Filter, 150 sq. ft., 304 S.S.
1—Feinc 5' x 6' Stainless Steel Rotary Vacuum Filter.
2—#10 Sweetland Filters, 27 leaves, 4" centers, 250 sq. ft.

## MISCELLANEOUS

1—Raymond 10' dia. Single Whizzer Separator.
2—Bantam Mikro Pulverizers, S.S.
1—Ross 6" x 14" Three Roll Mill.
1—J. H. Day 5" x12" Three Roll Mill.
3—Swenson Walker Continuous Crystallizers, 24" x 30' sections.
2—Robinson Sifters, 40" x 84", Stainless.
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1—Pfaudler Series EL glass lined jacketed reactor, 300 gal. complete with anchor type agitator and drive.

1—Pfaudler 200 gal. glass lined jacketed reactor, complete with impeller type agitator and drive.

5—Pfaudler 200 gal. glass lined jacketed reactors, complete with anchor type agitators and drives.

1—Pfaudler 100 gal. glass lined jacketed reactor, complete with anchor type agitator and drive.

3—Struthers Wells type 316 SS jacketed reactors, 2000 gal. complete with agitators and drives.

1—17,850 gal. type 304 SS storage tank, 9' x 36', 3/8" material.

1—Type 316 SS 2000 gal. horizontal tank.

1—Stokes SS granulating mixer, Model 21-J.

1—Pfaudler Series R 300 gal. glass lined jacketed reactor, complete with impeller type agitator and drive, 125# psi internal, 85# psi jacket.

1—Baker Perkins Size 16, Type UUEM, 150 gal. jacketed double arm dispersion type mixer, complete with compression cover and 100 HP motor.

2—Sturtevant #7 SS dust type rotary batch blenders.

1—Niagara SS filter, Model 510-28.

1—Oliver SS pressure precoat filter, 5'3" x 8'.

1—Shriver C.I. Plate and Frame Filter Press, 36" x 36", closed delivery, 4 eye, 60 chambers.

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1—Buflovak SS rotary vacuum dryer 3' x 15'.

2—Stokes Model 138J-20 single door vacuum shelf dryer, 20 shelves, complete.

4—Tolhurst 40" center slung rubber covered centrifuges with perforated baskets and motors.

3—Farrell Birmingham Banbury #1 mixers, complete with motors.

1—AT&M 40" SS suspended type centrifuge complete with motor, perforated basket and plow.

1—York Shipley 175 HP package steam generator, 135# psi.

1—Vulcan SS bubble cap column, 4' x 28' plates.

9—Davis Engineering SS heat exchangers, 145 sq. ft. (NEW).

1—Struthers Wells type 316 SS heat exchanger, 330 sq. ft.

1—Condenser Service type 316 SS heat exchanger, 350 sq. ft.

1—Downington type 316 SS heat exchanger, 750 sq. ft.

1—Swenson type 316 SS vacuum crystallizer, 3'6" x 12'.

1—Swenson type 316 SS vacuum crystallizer, 2' x 12'.

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AGAR—60 bgs, Meer Corp, Casablanca
ALDEHYDE—4 cks, Havre
ALUMINUM HYDRATE—5 bgs, Aceto Chemical Co, Bremen
ALUMIUM POWDER—50 dms, Crescent Bronze Powder Co, Hamburg
ALUMINUM SULFATE—441 bgs, Industrial Chemical & Dye Co, Rotterdam
662 bgs, Philipp Bros Chemicals, Bremen
AMBER OIL—5 dms, Lo Curto & Funk, Puerto Cortes
AMMONIUM CARBONATE—35 dms, Chemical Manufacturing Co, Liverpool
ANILINE DYES—10 dms, Arondy Corp, Rotterdam
7 dms, Carbic Hoechst Corp, Rotterdam
51 dms, Rotterdam
ANTIMONY—20 cks, Watson Geach, Hull
ANTIMONY OXIDE—439 bgs, National Lead Co, Newcastle
229 bgs, National Lead Co, Hull
ANTIMONY REGULUS—450 cs, Rijeka
BARIUM CARBONATE—5 dms, Mutchler Chemical Co, Hamburg
BARIUM CHLORIDE—110 bgs, Venice
BEESWAX—39 bgs, H H Pike & Co, Havana
25 bgs, Machado & Co, Ciudad Trujillo
50 bgs, Strohmeyer & Arpe, Pureto Plata
100 bgs, International Commodities Corp, Valparaiso
60 bgs, Kaufman Trading Corp, Valparaiso
164 bgs, Havana
42 bgs, Puerto Plata
60 bgs, Tampico
BENZOIN GUM—97 bdls, Meer Corp, Singapore
BENZOSULFIMIDE—30 dms, Foster T Smith, Yokohama
BERGAMOT OIL—10 cs, Coutin Associates, Cannes
12 cs, Polak Frutal Works, Cannes
BOIS DE ROSE OIL—8 dms, Hollander Trading Corp, Callao
14 dms, Lo Curto & Funk, Callao
BONE—152 bgs, International Packers Ltd, Rio Grande
BRONZE POWDER—400 dms, Putnam Chemical Corp, Hamburg
50 dms, Wm Recht Co, Hamburg
3 dms, H Solodow, Hamburg
BRUCINE ALKALOID—3 dms, Frank Samuel & Co, Southampton
CALAMUS OIL—1 cs, Chase Manhattan Bank, Rijeka
CALCIUM CARBONATE—1,000 bgs, Smith Chemical & Color Co, Hull
600 bgs, Hammill & Gillespie, Hull
400 bgs, N H Weitzner, Antwerp
374 bgs, Whittaker Clark & Daniels, London
CALCIUM PERBORATE—8 dms, Sinclair & Valentine Co, Gothenburg
CALCIUM PLUMBATE—4 dms, National Lead Co, Hull
CAMPHOR, SYNTHETIC—10 cs, Lo Curto & Funk, London
50 dms, Bremen
CAMPHOR OIL—11 dms, Lo Curto & Funk, Keelung
CARAWAY OIL—2 cbys, W Hoffman, Hamburg
CARAWAY SEED—200 bgs, R J Spitz, Rotterdam
500 bgs, Rotterdam
CARDAMOM—37 bgs, Lo Curto & Funk, Puerto Barrios
4 cs, P J Hanrahan, Puerto Barrios
23 cs, Wm E Martin & Sons, Puerto Barrios
CARNAUBA WAX—223 bgs, Biddle Sawyer Corp, Fortaleza
112 bgs, Strahl & Pitsch, Fortaleza
222 bgs, Smith & Nichols, Fortaleza
112 bgs, J W Hanson Co, Fortaleza
188 bgs, Biddle Sawyer Corp, Tutoia
188 bgs, Empire Trust Co, Tutoia
188 bgs, Irving Trust Co, Tutoia
126 bgs, National City Bank, Tutoia
125 bgs, Bankers Trust Co, Tutoia
63 bgs, Colonial Trust Co, Tutoia
381 bgs, United Commodities Corp, Salvador
100 bgs, Smith & Nichols, Salvador
226 bgs, Tutoia
CASEIN—2,200 bgs, Eugenio Lang, Buenos Aires
2,000 bgs, Tupman Thurlow, Buenos Aires
900 bgs, Crawford Kish & Co, Buenos Aires
3,800 bgs, J R Spellacy, Melbourne
150 bgs, First Spice Co, Rotterdam
1,000 bgs, Crawford Kish & Co, Gdynia
700 bgs, P A Dunkel, Buenos Aires
500 bgs, F C Gerlach, Buenos Aires
1,500 bgs, Buenos Aires
CASSIA—203 bls, Ludwig Mueller, Rotterdam
1,702 bls, Rotterdam
CASTOR OIL—559 tons, Bunge Corp, Bombay
CELERY SEED—88 bgs, P H Petry, Bombay
CHLORAMPHENICOL—15 kgs, Parke Davis Co, Genoa
CHLORINATED RUBBER—200 bgs, C M C Chemicals Inc, Liverpool
CHROME YELLOW—144 bgs, Chemical Bank, Rotterdam
CITRONELLA OIL—115 dms, Lo Curto & Funk, Puerto Barrios
50 dms, Keelung
CLAY, BALL—2,154 bgs, United Clay Mines Corp, Avonmouth
COALTAR—8 dms, C A Haynes, Havre
5 dms, Riches Nelson, Hamburg
COBALT OXIDE—347 cks, Antwerp
COCONUT OIL—300 tons, Manila
COPAL GUM—135 bkts, O G Innes Corp, Macassar
125 bgs, Rotterdam
COPPER CYANIDE—200 dms, Chemical Manufacturing Co, Liverpool
CORIANDER SEED—229 bgs, K H Landes & Co, Rijeka
200 bgs, K H Landes & Co, Casablanca
CORN OIL—200 tons, Corn Products Co, Rotterdam
CORN STARCH—600 bgs, Connell Rice & Sugar Co, Bremen
218 bgs, Impex Agricultural Corp, Rijeka
1,000 bgs, Rotterdam
200 bgs, Antwerp
CORNMINT OIL—5 dms, Mitsui & Co, Santos
CREAM OF TARTAR—100 bgs, Nylos Trading Co, Genoa
500 bgs, Leonhardt & Brush, Leghorn
CRESYLIC ACID—100 dms, Van Oppen & Co, Avonmouth
183 dms, Midland Tar Distillers, Liverpool
26 tons, Midland Tar Distillers, Liverpool
220 dms, M W Hardy & Co, London
CUMIN SEED—491 bgs, M J Golombeck, Bombay
CUTTLEFISH BONE—100 cs, D F Young, Yokohama
100 cs, Takoradi
DEGRAS—21 dms, Olympic Shipping Co, Liverpool
DEXTRIN—1,038 bgs, Stein Hall & Co, Rotterdam
700 bgs, Morningstar Paisley Inc, Rotterdam
450 bgs, Rotterdam
DYES, COALTAR—27 dms, H Bruckmann & Lorbacher, Hamburg
56 dms, Caldwell & Co, Hamburg
12 dms, Orlex Dyes & Chemical Corp, Hamburg
25 dms, Toms River Cincinnati Chemical Corp, Rotterdam
EARTH COLORS—1,450 bgs, Rotterdam
EPHEDRINE HYDROCHLORIDE—6 dms, Burroughs Welcome & Co, London
3 cks, Havre
FENNEL SEED—339 bgs, M J Golombeck, Bombay
FISHLIVER OIL—5 dms, Mitsubishi International Corp, Yokohama
FISHMEAL—6,522 bgs, H J Baker & Bro, Callao
5,435 bgs, Callao
FURFURAL—890 tons, E I Dupont De Nemours & Co, La Romana
GELATIN—248 bgs, D H Burdett, Avonmouth
35 dms, H Bruckmann & Lorbacher, Rotterdam
300 bgs, King Shipping Co, Hamburg
40 dms, D H Burdett, Liverpool
400 bgs, Transatlantic Animal By-Products Corp, Rotterdam
60 bgs, B Young, London
330 bgs, Chase Manhattan Bank, Hamburg
300 bgs, Manhattan Adhesives Corp, Antwerp
259 bbls, Antwerp
330 bgs, Rotterdam
55 bgs, Hamburg
GERANIUM OIL—2 dms, A Chiris, Algiers
GERMANIUM DIOXIDE—200 cs, American Metal Climax, Antwerp
GINGER—70 bgs, Kellys America Ltd, Alleppey
28 bgs, Kellys America Ltd, Kingston
56 bgs, K H Landes & Co, Kingston
GLUCURONOLACTONE—30 cs, Byron Chemical Co, Yokohama
GLUE—500 bgs, First National Boston, Hamburg
50 cks, Dr F Jonas Co, Marseille
GLYCERINE—64 dms, R P Casado, Havana
GLYCOL MONOSALICYLATE—3 cs, Havre
GUAR GUM—1,889 bgs, Stein Hall & Co, Bombay
381 bgs, Stein Hall & Co, Karachi
GYPSUM, CRUDE—10,100 tons, U S Gypsum Co, Hantsport
HAWTHORN BERRIES—4 bgs, Herbarium Inc, Rijeka
HYDROFLUORIC ACID—293 dms, Archer Daniels Midland Co, Hull
IODINE, CRUDE—100 dms, Bunge Corp, Yokohama
IRON OXIDE—40 bgs, Whittaker Clark & Daniels, Hull
JAPAN WAX—15 cs, Cornelius Wax Refining Corp, Kobe
KARAYA GUM—235 bgs, Colony Import & Export Corp, Bombay
377 bgs, Stein Hall & Co, Bombay
307 bgs, Jacques Wolf & Co, Bombay
LACTIC ACID—10 cbys, Kolon Trading Co, Hamburg
LACTOSE—36 dms, R J Saunders & Co, Rotterdam
5 cs, Chemo Puro Manufacturing Co, Hamburg
10 bbls, R J Saunders & Co, Hamburg
LAVANDIN OIL—5 dms, Bertrand Freres, Cannes
5 dms, Tombarel Products Corp, Cannes
6 dms, Cannes
LEMON OIL—18 dms, Canada Dry Corp, Hamilton
10 dms, Ungerer & Co, Vera Cruz
1 dm, Stuart Bros, Vera Cruz
LEMONGRASS OIL—102 dms, Lo Curto & Funk, Puerto Barrios
LIME OIL—1 dm, Citrus & Allied Essential Oils Co, Puerto Plata
LIVERMEAL—721 bgs, Wessel Duval & Co, Buenos Aires
LOCUST BEAN FLOUR—182 bgs, Nestle Co, Rotterdam
2,6-LUTIDINE—1 dm, Van Oppen & Co, Avonmouth
MAGNESITE—20 kgs, Jerdan Chemical Corp, Hamburg
MAGNESITE, BURNT—1,503 tons, Split
MANGROVE EXTRACT—400 bgs, Saxe Cutch Corp, Sandakan
MARJORAM LEAVES—65 bls, K H Landes & Co, Marseille
MENTHOL—75 cs, Norda Essential Oil & Chemical Co, Santos
50 cs, Lo Curto & Funk, Santos
150 cs, Mitsui & Co, Santos
MERCURY—25 flks, Vera Cruz
MINERAL COLORS—50 bgs, Revelli Chemicals Inc, Hamburg
MOLASSES—477 tons, W R Grace & Co, Salaverry
MONOSODIUM GLUTAMATE—100 dms, B L Lemke, Genoa
NAPHTHALENE—800 bgs, J N Forker, Liverpool
2,033 bgs, Wilco Chemical Co, Liverpool
784 bgs, J N Forker, Hull
1,060 bgs, International Chemical Corp, Gdynia
NUTMEG—260 bgs, K H Landes & Co, Port of Spain
50 bgs, M J Colombeck, Port of Spain
250 bgs, Lo Curto & Funk, Rotterdam
81 bgs, P H Petry, Hamburg
OCOTEA CYMBARUM OIL—45 dms, Ernst Roth & Co, Itajai
25 dms, American Metagraph Co, Itajai
OLIVE OIL—199 dms, Manufacturers Trust Co, Seville
388 dms, National City Bank, Seville
150 dms, Swiss Credit Bank, Seville
100 dms, Hanover Bank, Seville
100 dms, Marine Midland Trust Co, Seville
OLIVE OIL—150 dms, First National Boston, Seville
25 dms, A Beckman, Seville
25 dms, S M Wolff Co, Seville
ORANGE OIL—1 dm, Citrus & Allied Essential Oils Co, Puerto Plata
ORTHOVANILLIN—15 dms, H A Gogarty, Havre
OURICURY WAX—62 bgs, United Commodities Corp, Salvador
133 bgs, Cornelius Wax Refining Corp, Salvador
OXGALL—5 dms, J M Rodgers Co, Sydney
PALM OIL—801 tons, Balfour Guthrie, Matadi
PALMKERNEL OIL—632 cs, B M T Commodity Corp, Rotterdam
1,340 cs, Rotterdam
PALMKERNEL OIL, HARDENED—1,300 cs, Bauer & Loewy Trading Co, London
PALO SANTO OIL—34 cs, C Tennant Sons & Co, Buenos Aires
PEPPER, BLACK—240 bgs, Atlanta Textile Corp, Calicut
160 bgs, Ludwig Mueller, Calicut
320 bgs, A G Dunn, Calicut
80 bgs, C Czarinkow, Calicut
91 bgs, Mutual Spice Co, Colombo
320 bgs, Reliable Mercantile Co, Alleppey
960 bgs, East India Trading Co, Alleppey
240 bgs, V A Cordovi, Alleppey
160 bgs, K H Landes & Co, Alleppey
160 bgs, C Czarinkow, Alleppey
160 bgs, Ludwig Mueller, Alleppey
160 bgs, A G Dunn, Alleppey
400 bgs, Otto Gerdau, Alleppey
160 bgs, D Howver, Alleppey
160 bgs, C M Van Sillevoldt, Alleppey
160 bgs, Atlanta Textile Corp, Cochin
240 bgs, A G Dunn, Cochin
200 bgs, C M Van Sillevoldt, Belem-Para
2,160 bgs, Alleppey
480 bgs, Singapore
400 bgs, Cochin
500 bgs, Santos
PEPPER, RED—25 bgs, American Commerce Co, Yokohama
100 bgs, Hismoco American Co, Kobe
a-PICOLINE—29 dms, Reilly Tar & Chemical Corp, Manchester
104 dms, Rotterdam
PIMENTO LEAF OIL—4 dms, Magnus Mabee & Reynard, Kingston
POLLACKLIVER OIL—11 dms, Arista Oil Products Corp, Yokohama
POLYETHYLENE—174 bgs, Goodrich Chemical Co, Bremen
POLYVINYL ALCOHOL—400 bgs, Marubeni Iida Co, Kobe
POLYVINYL CHLORIDE—1,261 cs, Hamburg
POLYVINYL CHLORIDE RESIN—2,000 bgs, Mitsubishi International Corp, Yokohama
PONTIANAK GUM—20 cs, Olson Importing Co, Singapore
POPPYSEED—500 bgs, Louis Furth, Gdynia
150 bgs, Globe Products Co, Gdynia
300 bgs, Sokol & Co, Gdynia
600 bgs, Rotterdam
POTASSIUM FERROCYANIDE—32 dms, Philip A Hunt Co, Hamburg
POTASSIUM NITRATE—292 bgs, Venice
PSYLLIUM SEED—20 bgs, S B Penick & Co, Marseille
PYRETHRUM FLOWERS—110 bls, P H Petry, Puna
QUEBRACHO EXTRACT—4,898 bgs, Barkey Importing Co, Buenos Aires
300 bgs, Olson Importing Co, Buenos Aires
9,264 bgs, American Tanners Ltd, Buenos Aires
650 bgs, Tan American Corp, Buenos Aires
QUINCE SEED—192 bgs, Khorramshahr
QUININE SULFATE—6 dms, Lo Curto & Funk, Hamburg
RADIUM ELEMENT—4 cs, Radium Chemical Co, Antwerp
RAPESEED—300 bgs, S Davis Co, Rotterdam
RICE STARCH—200 bgs, Aurora Manufacturing Co, Bremen
170 bgs, Manhattan Adhesives Corp, Bremen
240 bgs, Rotterdam
RUTIN—10 dms, Chas L Huisking & Co, Melbourne
30 dms, Meer Corp, Sydney
12 dms, Lo Curto & Funk, Sydney
SANDALWOOD OIL—7 cs, National City Bank, Bombay
SEEDLAC—1,250 bgs, Wah Chang Corp, Bangkok
500 bgs, Parks Co, Bangkok
250 bgs, Haeuser Shellac Co, Bangkok
500 bgs, Commercial Alcohols Ltd, Bangkok
700 bgs, Calcutta
SENNA LEAVES—200 bls, Meer Corp, Tuticorin
SESAME OIL—20 cs, Bohea Trading Co, Kobe
SESAME SEED—2,000 bgs, Independent Halvah & Candies, Pureto Barrios
500 bgs, Greenwich Seed Co, Puerto Barrios
224 bgs, Archibald & Kendall, Puerto Barrios
SESAME SEED, HULLED—200 bgs, M J Golombeck, Bombay
SHELLAC—150 bgs, Mantrose Corp, Bremen
SHELLAC WAX—20 bgs, Mantrose Corp, Bremen
SIENNA, BURNT—400 bgs, Reichard Coulston, Leghorn
SILICUM CARBIDE—20 bgs, D H Weiss Associates, Hamburg
SODIUM AZIDE—25 bbls, Lo Curto & Funk, Bremen
SODIUM BICARBONATE—500 bgs, Chemical Manufacturing Co, Liverpool
SODIUM CYANIDE—200 dms, Chemical Manufacturing Co, Liverpool
250 dms, Chemical Manufacturing Co, Middlesbrough
SODIUM HYDROXYCINNAMATE—21 dms, Fils Corp, Marseille
SODIUM LAURYL SULFATE—227 bgs, Synthetic Fertilizers & Chemicals Inc, Antwerp
SODIUM PERBORATE TETRAHYDRATE—50 bgs, Elock Drug Co, Bremen
SODIUM PHOSPHATE—500 bgs, Rotterdam
SODIUM SULFATE—2,000 bgs, Rotterdam
SORBITOL m-OLEATE—4 dms, Olympic Shipping Co, Liverpool
SULFAGUANIDINE—30 dms, Rotterdam
SULFAMIC ACID—9 bgs, Wedeman & Godknecht, Rotterdam
SULFANILAMIDE—20 dms, Lo Curto & Funk, Rotterdam
SULFUR, CRUDE—3,900 tons, E I Dupont De Nemours & Co, Coatzacoalcos
TAPIOCA—250 bgs, Manhattan Adhesives Corp, Itajai
TAPIOCA FLOUR—5,950 bgs, Stein Hall & Co, Bangkok
224 bgs, Manhattan Adhesives Corp, Bangkok
2,205 bgs, American Metagraph Co, Itajai
TARTARIC ACID—100 bgs, Frank Samuel & Co, Marseille
140 kgs, Palermo
TETRAALKYLTHIOPYROPHOSPHATE—22 cans, Plant Products Corp, Rotterdam
THEOBROMINE—5 cks, Havre
TOLU BALSAM—50 cs, Barranquilla
TRAGACANTH GUM—144 bgs, Am-Iran Corp, Khorramshahr
42 bgs, Eastern Mohair & Trading Co, Khorramshahr
100 bgs, Khorramshahr
TRICHLOROETHYLENE—500 dms, Chemical Manufacturing Co, Liverpool
10 dms, Averst Lab, Liverpool
40 dms, Rumianca U S A Chemical Corp, Genoa
40 dms, J L Ward & Co, Genoa
ULTRAMARINE BLUE—590 bgs, Whittaker Clark & Daniels, Hull
UREA—4,000 bgs, H J Baker & Bro, Antwerp
700 bgs, Rotterdam
VANILLA BEANS—17 cs, Marseille
VETIVER OIL—1 dm, Lo Curto & Funk, Puerto Barrios
1 cs, Cochin
YLANG YLANG OIL—2 cs, Marseille
ZINC OXIDE—480 bgs, London
600 bgs, Havre
ZIRCON SAND—5,467 bgs, Lo Curto & Funk, Brisbane

## Los Angeles

BONEMEAL—1,102 bgs, H M Newhall & Co, Alexandria
CALCIUM NITRATE—6,000 bgs, Atkins Kroll & Co, Amsterdam
30,000 bgs, Wilson & Geo Meyer & Co, Oslo
CARAWAY SEED—50 bgs, Chile Products Co, Rotterdam
DEXTRIN—395 bgs, Morningstar Paisley Inc, Amsterdam
GYPSUM, CRUDE—18,077 tons, Kaiser Gypsum Co, San Marcos
MOLASSES—15,390 tons, S Western Sugar & Molasses Co, Kaoshiung
PAPAIN—50 cs, Wm E Martin & Sons, Matadi
PEPPER, RED—100 bgs, J G Wile, Kobe
75 bgs, Mitsui & Co, Kobe
PETROLEUM, CRUDE—126,720 bbls, Douglas Oil Co, Maracaibo
619,115 bbls, Standard Oil Co, Dumai
434,761 bbls, Union Oil Co, Mina Al Ahmadi
PIMENTO—48 bgs, California Commodities Corp, Kingston
TAPIOCA FLOUR—3,324 bgs, Stein Hall & Co, Bangkok
UREA—6,250 bgs, Wilson & Geo Meyer & Co, Oslo

## Philadelphia

ASBESTOS FIBER—3,480 bgs, Chas Kurz & Co, Lourenco Marques
1,300 bgs, Lourenco Marques
1,587 bgs, Liverpool
BONE—915 bgs, Baugh & Sons, Buenos Aires
BONEMEAL—1,120 bgs, Buenos Aires
CASEIN—1,000 bgs, National Casein Co, Buenos Aires
CASTOR OIL—255 tons, Santos
CHESTNUT EXTRACT—600 bgs, Barkey Importing Co, Naples
GYPSUM, CRUDE—13,204 tons, U S Gypsum Co, Hantsport
LICORICE ROOT—8,968 bbls, Izmir
NAPHTHALENE—752 bgs, London
OLIVE OIL—25 dms, Chase Manhattan Bank, Seville
PHOSPHATE ROCK—4,503 tons, Curacao
PYRETHRUM FLOWERS—500 bls, Mombasa
QUEBRACHO EXTRACT—3,799 bgs, Buenos Aires
SHELLAC—200 bgs, Calcutta
TAPOCA FLOUR—4,000 bgs, Brown Bros, Itajai
800 bgs, Bankers Trust Co, Itajai
1,000 bgs, Bankers Trust Co, Bangkok
UREA—100 bgs, Nylos Trading Co, Genoa
ZIRCON SAND—4,003 bgs, Brisbane

## San Francisco

ALUMINUM SULFATE—150 bgs, C M C Chemicals Inc, Manchester
AMMONIUM CHLORIDE—150 bgs, C M C Chemicals Inc, Liverpool
ANTIMONY OXIDE—250 bgs, National Lead Co, Liverpool
242 bgs, National Lead Co, Glasgow
BRONZE POWDER—40 dms, Wedeman & Godknecht, Glasgow
CALCIUM CARBONATE—1,600 bgs, Pluess Stauffer, Antwerp
CALCIUM FORMATE—600 bgs, C M C Chemicals Inc, Liverpool
720 bgs, C M C Chemicals Inc, Manchester
CASEIN—961 bgs, Western Dairy Products, Auckland
224 bgs, J R Spellacy, Sydney
1,500 bgs, E Lang, Buenos Aires
120 bgs, Borden Co, Buenos Aires
CLOVES—50 bgs, Durban
COPRA—500 tons, Cargill Inc, Legaspi
500 tons, Cargill Inc, Jose Panganiban
500 tons, Manila
500 tons, Cebu
500 tons, Siain
DILL SEED—50 bgs, Bombay
FISHMEAL—2,174 bgs, Marine Midland Trust Co, Chimbote
2,151 bgs, Balfour Guthrie, Chimbote
5,512 bgs, Marine & Animal By-Products Corp, Arica
11,010 bgs, Albumina Supply Co, Arica
2,202 bgs, Balfour Guthrie, Arica
8,013 bgs, Callao
5,752 bgs, Chimbote
GELATIN—40 cs, Coignet Chemical Co, Antwerp
GRAPHITE—450 bgs, Pacific Graphite Co, Hong Kong
GUAR GUM—400 bgs, Morningstar Paisley Inc, Bremen
4,018 bgs, General Mills Inc, Karachi
IRON OXIDE—400 bgs, American Chemical & Pigment Corp, Barcelona
LACTALBUMIN—1,344 bgs, A J Mills & Co, Auckland
LIVERMEAL—594 bgs, International Packers Ltd, Buenos Aires
LOCUST BEAN GUM—150 bgs, Stein Hall & Co, Genoa
PAPRIKA—1,025 bgs, B C Ireland, Marseille
PEATMOSS—200 bls, Nurserymen's Exchange, Bremen
PETROLEUM, CRUDE—388,000 bbls, Standard Oil Co, Dumai
POLYVINYL ALCOHOL—100 bgs, Marubeni Iida Co, Kobe
ST JOHNS BREAD—80 cs, Parodi Erminio & Co, Genoa
SESAME SEED—100 bgs, Lastreto Phillips Co, San Juan del Sur
SODIUM CHLORATE—666 dms, Marseille
SODIUM PERBORATE TETRAHYDRATE—661 bgs, Antwerp
TITANIUM D'OXIDE—1,200 bgs, Pacific Coast Chemical Co, Nagoya
TRICHLOROETHYLENE—100 dms, International Selling Corp, Marseille
ZINC CYANIDE—20 dms, P W Bellingall, Genoa

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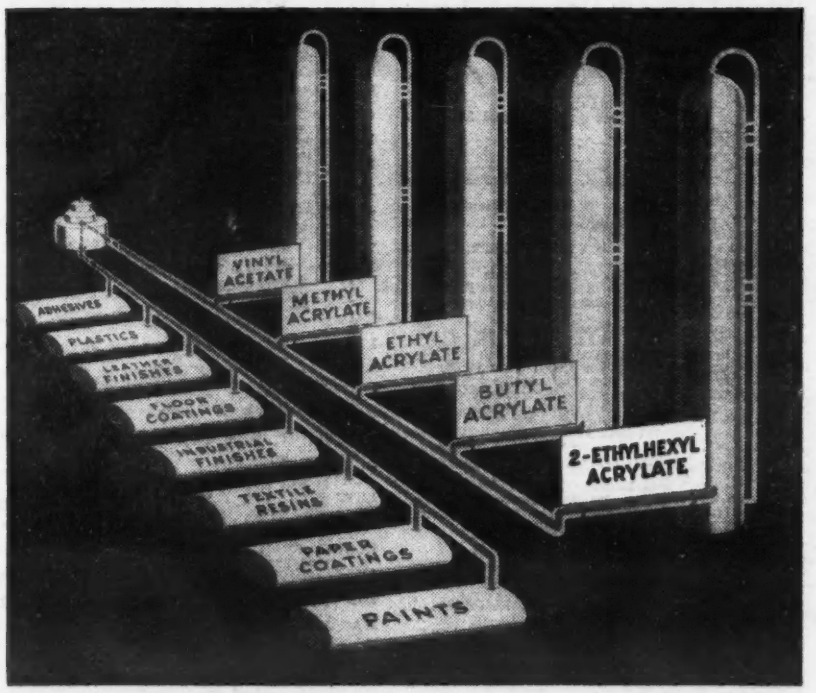


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